



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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NEW ELEVATOR AT SEATTLE.

A change is taking place in the method of handling grain on the Pacific coast, and during the last year a number of grain elevators have been built on the plan of those in use in the Mississippi valley and throughout the East. All grain shipped from Pacific ports is shipped in sailing vessels, and as storms are generally encountered on the long journey to Europe, the grain must be sacked for shipment, to prevent its shifting about in the vessel.

The structure recently erected at Seattle, Wash., by the Seattle Terminal Railway and Elevator Company, for the handling of grain, is a warehouse and elevator combined, and is fitted with machinery for handling bulk and sacked grain. The main building, of which we give a cut herewith, is 531 feet long, 121 feet wide and two stories high, with an elevator in the center 40x90 and 100 feet high. Over 3,000,000 feet of lumber were used in the construction of the building. It stands upon immense piles 15½ feet apart. However, the company does not intend to trust too much to the piles, and so have a large force of men at work tearing the hill down by means of a tremendous stream of salt water pumped through pipes. They are washing the earth down at the rate of 200 cubic yards daily. Most of it is coarse sand, which makes a splendid foundation, but lately they have struck a layer of blue clay. The outside line of the company's property has been bulkheaded to prevent any of the soil from being washed away.

In the northwest corner of the main building is a handsome set of offices, and about the center of the building is a stairway leading to the next floor. A 14-foot platform extends around the entire building, and along the west side of building is a side track onto which cars are run when it is desired to unload them on to the first floor.

Another track runs into the building at the south end of the second floor. Fourteen cars can stand on this track inside the building, and be unloaded at the same time. If cars are loaded with bulk grain they are unloaded by means of steam scoops into the bins provided. If the wheat is in sacks it is unloaded by hand, and the contents of each car placed by itself. When the loose wheat is

discharged into the bins it is conveyed to the top of the elevator where it is discharged into bins to await sacking. The storage capacity of the elevator is about 100,000 bushels, and the capacity of the warehouse is 1,500,000 bushels.

On the east side of the main building, as shown in the cut, are two wings, 30x60 feet, extending out to deep water, so that the largest sea-going vessel can be taken to the wharf even at low tide. The ends of these wings or chutes can be raised or lowered at will. Through these the grain is conveyed by means of a steam carrier. When the wheat on any particular floor is to be loaded onto the ship, one end of the carrier is raised to a level with that floor and the other end is on the ship, the chain is set in

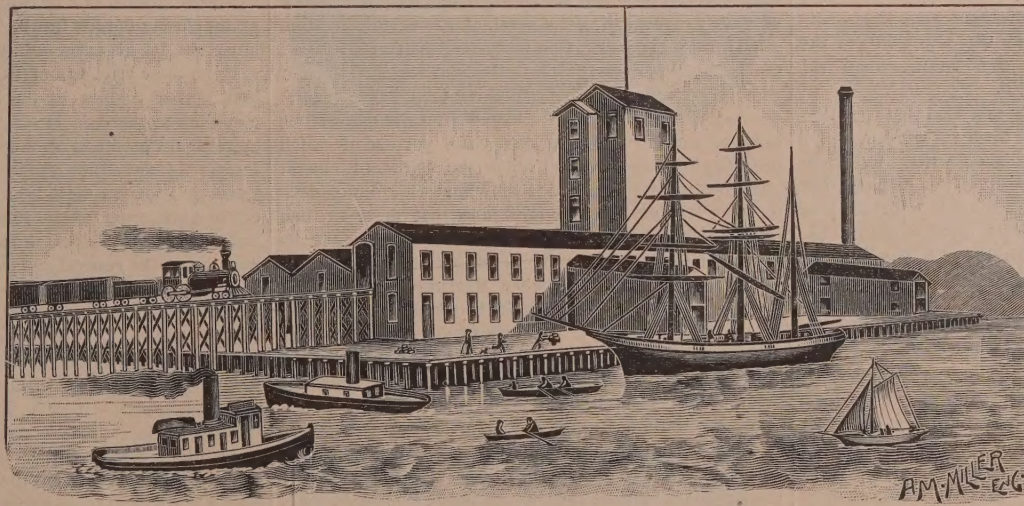
Little Club and the Blue stem are the only varieties to be had.

The first vessel loaded with grain at Seattle was the barque Mary L. Burrell, with 80,000 bushels of wheat for Cork; she sailed the last of October. About twenty-five men are employed by the company, and 20,000 to 25,000 bushels of grain can be loaded in a day.

The officers of the company are Col. Thomas Ewing, president; John Leary, vice-president; Jacob Furth, treasurer; B. F. Shawbut, manager railway, and C. G. Austin, manager elevator department.

The completion of this elevator and warehouse and its immediate use shows that Seattle was long in need of just such a plant. It is a great stride forward for that port,

and marks the beginning of a new era in the grain trade of the city. With such a strong company, composed as it is, of live, enterprising men, to take the lead, the export grain trade of Seattle is sure to increase rapidly.



NEW ELEVATOR AT SEATTLE, WASH.

motion, and as it consists of planks set in iron frames, about a foot apart, a sack placed on it is quickly carried to the end. The sacks are placed upon the chain by a force of men, and in this way the ship is soon loaded. The engine to provide the power for working this machinery is a magnificent Corliss of 120-horse power. It is in the elevator.

The boiler house stands apart on the west side of the elevator. It is a brick building, 30x36 feet, and has a stone foundation. This house contains two boilers and an immense pumping engine. The water to supply the boiler is brought by a pipe line owned by the company, from a spring back in the hills.

The company has had a great deal of difficulty in securing cars to bring what wheat they have purchased from Eastern Washington. Agents are now located in all the different towns in the wheat-growing section, and others are traveling, buying wheat for the company. The

are nearly all unfavorable. One says the sparrow is cheeky, another that he is a pirate, a third relieves himself by calling him "a hard-billed, pugnacious, impudent rascal, without a redeeming quality in him." The losses from his depredations are said to run into the millions sterling a year.

One farmer suggests that a reward should be offered for the eggs of the birds. This plan, however, has been found to work in two ways. Rewards were offered for snakes in India, and the natives drove a profitable trade by breeding snakes for the sake of the reward. Another suggestion made is, a farmer should be compelled to destroy so many sparrows for every acre of arable land. A deputation to the Minister of Agriculture is also talked of. The redeeming qualities of the sparrow are his courage and determination, and he will probably require them before the coming onslaught.

WHAT TO DO WITH AIR RATS.

The common sparrow seems to have as few friends in England as on this side of the water, says the *Toronto Globe*. Correspondents of the British agricultural papers are discussing him with a great interest, and their opinions

OPTION TRADING.

BY W. C. BROWN.

It is a natural impulse of the energetic business man to indulge in speculation. The possibility of a transition from comparative poverty to affluence by a single master stroke of what is generally denominated as luck, is very fascinating, and to a greater or less extent permeates all branches in mercantile, and often professional life. The practice, however, is a buzz saw of the most prolific character, which sooner or later is bound to lacerate morally, mentally, and frequently physically, all those who succumb to its subtle fascinations. Gambling in every form is to be deprecated and discouraged. It is the fundamental duty of every business man to avoid all those forms of illegal traffic whose tendencies are to engulf him in a vortex of ruin, and to bring lasting disgrace on those who are near and dear to him. I am as unalterably opposed to gambling as the most rigid statutes of our civil government, or the mandates of divine writ. I preface my remarks with this broad statement, which will admit of no misinterpretation of my position. At the Ft. Wayne convention of millers in harmony with my convictions, I publicly opposed the passage of a resolution indorsing the Butterworth Bill against options. I opposed this bill, and I oppose it now, as a measure calculated to work the greatest harm to the milling interests of this country. Although I was sincere and honorable in my judgment, I was termed "a gambler" by a number of my confreres on the floor. I did not resent these unjust accusations, for while I believed my maledictors to be sincere in their accusations, except that their zeal got the better of their sober judgment, I was morally certain that but few, if any of them, knew the substance of the Butterworth Bill; fewer knew its import, and fewer still were acquainted with the details of option trading. With grotesque and fantastic vision floating through their imaginations of a black-winged, fork-tailed individual labeled "Old Hutch," they jumped at the thoroughly erratic conclusion that the Butterworth Bill would effectually crush the life out of this remarkable individual, or any others who might follow in his not eminently illustrious footsteps. With a convention almost unanimously opposed to my mode of reasoning, I made a brief but ineffectual attempt to convince and convert the eleven stubborn jurymen, and finally gave up in despair. The controversy, however, awakened a study of the subject, and even before the adjournment there were those who were willing to acknowledge that the arguments of the minority were worthy of more consideration than had been accredited them.

I am not prepared to refute the assertion that the passage of the Butterworth Bill will favor the farmer, but I do insist that if it will favor the agriculturist it will do so at the expense of the milling interest of this country. Let no one in this convention delude himself with the idea that if the Butterworth Bill against options should become a law, it will do away entirely with gambling in futures. You cannot by a single stroke of legislation transform the operator on the Chicago Board of Trade into a church deacon, nor can you make those conditions predominant whereby the ruling value of cereals will be governed entirely by the laws of supply and demand. You might as well attempt to dam up the roaring cataract of Niagara with a feather, or to have prevented the terrible cyclone at St. Paul by means of a prohibitory statute, as to fetter the spirit of speculation which characterizes and distinguishes the American business man from his fellows in other lands. Such legislation if enacted would be a dead letter on the statute books, as flata failure as the Keely Motor, or prohibition in Kansas. As stated before, if the Butterworth Bill aids the farmer, it does it at the expense of the milling interests of the country. But it becomes a problem which does not admit of ready solution, whether the proposed measure of Mr. Butterworth would or would not favor the farmer, with preponderance of evidence to the effect that the farmer is more likely to be injured than aided by its passage. Should the proposed measure of Mr. Butterworth pass, it will have the effect of concentrating the gambling in wheat, which is now spread over a period of twelve months, to the confines of a single day. In other words, the gambling would be done in cash wheat, and with the limited supplies of grain in Toledo, Detroit and Chicago, as shown by the statistics of the past few years, it would be quite possible for Mr. Hutchinson and his associates to buy up every pound of grain in those three markets, and corners in wheat like the deplorable Harper-Fidelity-Bank

affair, could be inaugurated at the pleasure of the manipulators; nor could the millers break it as it was done in Chicago, by making every barge, tub or barn "regular." The miller would have to pay the prices asked or shut down his mill. He could not be assisted by a crowd of bears selling futures to break the market. The bear influence would be placed at a colossal disadvantage in such a contest, and the miller would stand in the breach, the innocent victim of his own folly. Like Samson of old, by his own misguided strength he would pull down his house on his own defenceless head. I have given this rather lengthy preface to the subject upon which I am advertised to speak to carry the idea that no form of legislation can effectually prevent gambling. If now it can be proven that the miller can use options legitimately and to his great advantage, then it becomes a question whether option dealing should be suppressed, as a method of endeavoring to prevent its illegitimate use.

Option trading is the miller's promise to pay, and is no more gambling in its legitimate use than the banking system of our country. "When you sell options, you sell something you haven't got," howls the enemy of options. Literally this may be true, but we retaliate by the incontrovertible fact that when you give your ninety day note at bank you are guilty of the same thing. You are dealing in something you do not have, and if the one is gambling, the other is likewise. But you say, when I borrow at bank I haven't the money, but I have the wheat which I can sell for cash any time; and when I sell ten thousand December wheat I have the cash in bank which will buy all the wheat I contract to deliver.

The element of speculation enters into every business, of necessity, for it is the fundamental principle of profit. The miller who is so radically opposed to option trading because it is "gambling," buys of the farmer a thousand bushels of wheat at a given price. He does not consider that the transaction involves a speculative phase, and yet strictly speaking it does. He is speculating to the extent of figuring that by the time he gets that purchase ground into flour the price of flour will be at a figure which will enable him to sell his grinding at a profit. The merchant buys dry goods; the real estate dealer buys land, intending to sell at a profit, which involves speculation. The contractor who is building our half-million-bushel elevator is a gambler, according to the reasoning of the opponents of options, for he sold us something he did not have. When he closed the contract he didn't have a stick of timber, nor a nail, nor a perch of stone; still he is not considered a gambler. Continuing the argument further, the ministers in every pulpit in the land are gamblers, if gambling involves "selling something they haven't got," for they contract for a stipulated sum to deliver one hundred and four sermons per year, not one of which probably have they written when the contract is closed. These examples may serve to show that while option dealing may involve speculation, it does not more so than other branches of mercantile life, and therefore, in its legitimate use is as honorable as milling itself.

The period of the year when the supply and demand to the miller is evenly balanced is comparatively brief. It is with him usually a feast or a famine. Shortly after harvest he is flooded with grain, and is compelled to turn away hundreds of bushels, knowing well at the time that in later months he will sadly need the grain that he absolutely forces to hunt another market. It is to enable him to "in the time of peace prepare for war," that options will assist him most effectually. Let us assume that he has a granary with a capacity of 100,000 bushels. According to the reasoning of some of my distinguished associates it would be wise for him to fill up that granary at the prevailing price of wheat, and to hold it with the expectation of grinding it into flour later at a profit. This he maintains is not gambling. I maintain that it is gambling. It is a distinction without a difference, to sell something you haven't bought, and to buy something you haven't sold, as the transaction in either instance involves speculation until the traffic is closed, and the balance struck on profit and loss. The miller must lay in a stock of wheat when it is offered freely after harvest, or it is shipped East out of his reach, and he cannot secure it when he needs it. He therefore buys his granary full and holds it unprotected, and this my distinguished friends say is not gambling. Possibly a month or two later, from some cause or other, possibly from very large crops in other lands, prices decline 10 cents per bushel. The luckless miller finds himself loser to the extent of \$10,000. His bankers find he is a heavy loser. In self-protection they close him out, and he awakens from his dream that

he is not doing a gambling business, to find himself a bankrupt.

On the other hand, when making his purchase, had he sold an equal quantity of wheat in his nearest market center, where he could deliver the grain if it were to his interest to do so, he could rest in absolute security. He has the wheat safe where it cannot be taken to the Eastern market. He has bought it and sold it. Should the price have declined 10 cents when he is ready to use the wheat, he can buy in his option at 10 cents less than his sale, and this profit cuts down the cost of his cash wheat 10 cents. If, on the other hand, wheat should advance 10 cents per bushel, his cash wheat costs him only the market price, the price he would be compelled to pay if he were to go on the market at that time; and by a little judgment his profit could be the more increased by buying in the option when the market showed very strong from sudden and ephemeral causes, and carrying his cash wheat for the moment unprotected. Thus, by the use of the option he would be absolutely sure of grinding stock and as absolutely protected against fluctuations of a market, and possible bankruptcy.

But options present another attractive safeguard to the miller, particularly to those of large capacity, in effecting large sales. These are usually made on a very slender margin, frequently not over 10 cents per barrel. These orders, likewise, frequently come when the miller has no surplus of wheat. The sale must be made or refused at once. If he waits to buy in the wheat before answering the telegram it will be too late, and the sale is lost. Large mills of 500 to 1,000 barrels' capacity are frequently confronted with this condition, and must be prepared to meet it. This they do by wiring their brokers in Chicago, Toledo or Detroit, to buy for them the wheat necessary to make the sale for December, May or August delivery. The relative difference between cash and these options is fixed, and does not often vary. The miller does not expect to have this wheat delivered to him; he does not want it. He simply buys the futures until he can buy the cash wheat from his shippers, when he sells back his futures. Let us assume that he has sold his flour on a basis of 88 cents for cash wheat, which is the price he would have to pay. He immediately buys December wheat at possibly 93 cents, and is protected in his flour sale. If the market jumps up 5 cents per bushel before he can buy the cash wheat to make good his flour sale, the miller is supremely indifferent, for he knows that December wheat has also advanced 5 cents, and he can pay the market price for the grain, closing out his futures at sufficient profit to reimburse him for his extra outlay for cash wheat.

From these brief examples it can be readily deduced that option trading by the miller, instead of proving a gambling measure, is exactly the reverse. The days of extravagant profits in milling are gone—gone, probably, forever. Competition in this, as in other branches of trade, is becoming more keen each year, and profits are cut to a minimum, except in the case of the small country mill which does a local business. But where the mill must go on the general and overstocked market with its flour, it must accept orders when it can get them. The antediluvian ideas advanced in convention, as to the proper method of selling flour, namely, after the wheat is purchased and in the storehouse, "are too trifling to be refuted, and deserve only to be mentioned that they may be despised." I leave it to the intelligence of this convention the supreme contempt in which a miller would be held by the Eastern flour buyers who, on telegraphing to the miller for prices on 10,000 barrels of flour, would send a message in reply something like this: "If you will wait week or ten days until can buy 50,000 wheat, will make you price on 10,000 barrels." What a sublime spectacle it would be for the Eastern flour merchant in turn to cable European customers: "Can't make price for ten days, till mill buys wheat." The very idea, which by the way was very soberly advocated by a number of ultra-conservative millers in convention assembled—with due deference to their age and experience—is ridiculously absurd, not in keeping with our country, our age or our intelligence.

The miller must be prepared to supply the demand when the demand comes. He is no longer the autocrat; the buyer now assumes that royal title. He must be prepared at all times, under all conditions, to make his price upon any quantity of flour wanted, if he desires to keep up with the times and his keen competitors. There is but one way in which he can do it intelligently, logically and conservatively, unless he has at all times a well-filled elevator, and that is by the proper and legitimate use of option dealing. It is his Gibraltar Rock of conservatism

his impregnable bulwark of protection against the whims and caprices of a vacillating market.

I am free to acknowledge that option trading has been perverted from its legitimate and lawful use, to subserve the end of gamblers and others whose purses are fattened and depleted by the fluctuations of the grain market. We do not champion the cause of options to favor this unscrupulous class, but in spite of this objectionable feature. It is against this phase of option trading that the honest, but misguided, efforts of Mr. Butterworth are directed in his measure now before Congress. He is innocently endeavoring to cut off the tail of a useful and harmless dog directly back of his ears. He would prevent gambling in options by killing options themselves. I read somewhere once of a noble red man having become severely poisoned about the face. When brought before the medicine man of the tribe for cure, that dignitary ordered his head cut off. It cured the ailment, unquestionably, but the treatment was a little severe on the patient. It is just this sort of treatment that Mr. Butterworth proposes to administer to options by his bill in Congress. But it is too severe—it is altogether likely that homeopathic treatment is better adapted to the ailment of the case.

Evil disposed persons can work harm from any calling that is thoroughly honorable. I once sat behind two gamblers, who by some motive had been guided into church one Sunday. But the minister had scarcely announced his text ere they had made a bet on the length of the sermon. And yet no one thought it logic for a moment to discontinue divine service because of this affair.

There are measures proposed which I have not the time, nor you the patience, to discuss here—which will restrict the indiscriminate use of options, and will at the same time enable the miller to use them in self protection. Such legislation is needed to eradicate the attendant evils of option trading, but the measure now before Congress is too sweeping in its scope, and should be opposed by every member in this convention.

While there is gambling in option dealing, option dealing is not by any means gambling. In its legitimate and judicious use, as it becomes more thoroughly understood by the miller, he will learn to consider it one of the essentials of trade, and a very potent factor in eliminating the speculative features of his business.

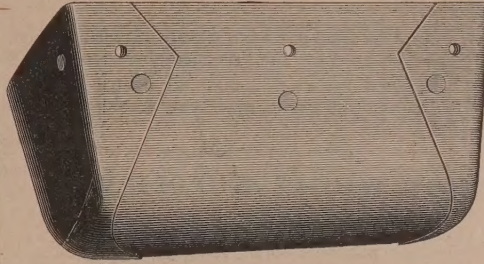
DIRTY INDIAN WHEATS.

Indian wheats have always been and always will be a nuisance in Great Britain. Aside from their thinness, riciness and general debility, says the *Milling World* of Buffalo, they are nasty from the admixture of outside matter. A recent Liverpool, Eng., announcement is as follows: "Complaints are very general that the Kurra-chee wheats this season are unusually full of dust—so full, indeed, as to render it impossible to use the grain in many cases. The dust is exceedingly fine and very obnoxious, the slightest movement of the wheat in bulk creating clouds of it. In the case of a large miller in Yorkshire, the dust caused by elevating the wheat from the vessel to the mill is declared to be a public nuisance, and the miller in question is unable to use these wheats any longer. The dust is evidently caused by the dirt in the wheat, and ordinary aspirating has hardly any effect upon it. As many millers may find themselves in the same position as this Yorkshire miller, it is to be hoped that shippers will endeavor to improve matters. Almost any impurity is capable of being extracted by an advanced miller, but in the case of this smoke-like dust, mechanical means seem powerless to combat it." This is some of the Indian wheat whose "redeeming qualities," when "understood," will "drive" American flour out of the British market after the aforesaid American flour has ceased to go to the aforesaid British market, and is all needed for home consumption! The stinking dust that arises from the Indian wheat is a mixture of all the foulness of a disintegrating race of paupers. It is made up of clay, sand, straw, awns, powdered camel's dung, and all sorts of unpleasant impurities absorbed from contact with filthy laborers, filthy animals and filthy storage. With such wheat to grind, it is small wonder that British mills are burdened with steamers, whizzers, cookers, washers and driers, and it is still smaller wonder that the flour made from it is what British science calls "a non-descript" mixture of wholly problematic quality.

According to *Daily Business* Chicago received 2,837 cars of wheat and 11,849 of corn during October, against 5,892 of wheat and 9,895 of corn in October, 1889.

THE SALEM ELEVATOR BUCKET.

The fact that 2,000,000 Salem Elevator Buckets have been sold, is one which speaks in sufficiently loud tones of praise for this excellent device. Its position has been gained in the face of all sorts of competition; and that

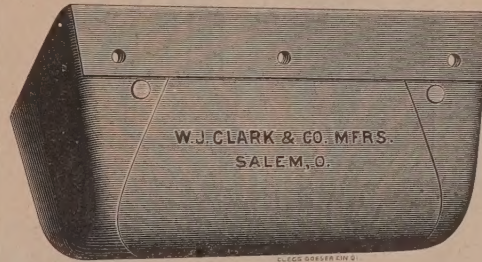


CUT NO. 1.

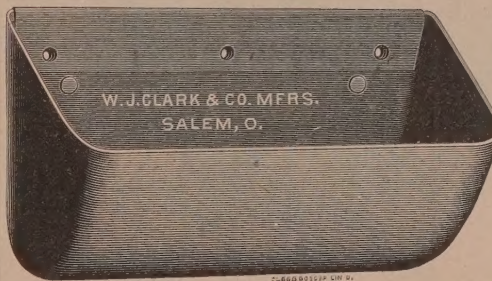
the Salem is still a prime favorite with users, for all sorts of purposes, is in itself a volume of recommendation.

The Salem Bucket is made from one piece of steel, so cut that when stamped into the most approved shapes, the front and the ends are smooth, with seamless front, corners and double thickness at the bottom corners and the back—see cut No. 1.

The additional strength and rigidity of shape thus secured is an important feature found only in the Salem

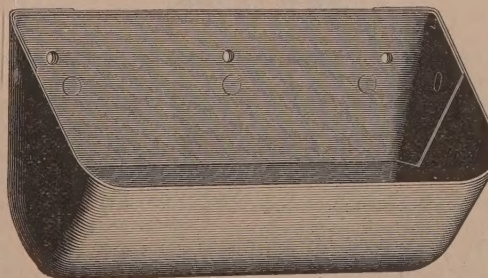


CUT NO. 2.



CUT NO. 3.

Bucket; and the bucket is further strengthened where it is bolted to the carrying-belt, by a binding piece which straddles the upper part of the bucket back, as illustrated in the two cuts, Nos. 2 and 3, and furnishes two additional thicknesses of metal, making four thicknesses altogether to withstand the strains which so frequently tears ordinary elevator buckets from their carrying belts. This construction renders the Salem perfectly safe for ordinary mill and elevator work. For extra heavy work, handling ear corn, ores, coal, broken stone, etc., the patent re-inforced back, illustrated in cut No. 4, is an effectual safe-



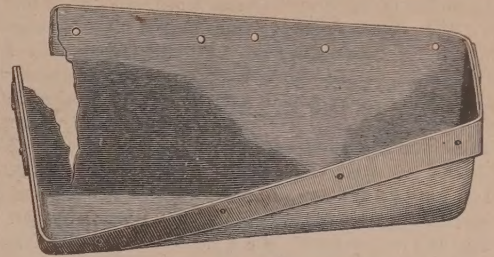
CUT NO. 4.

guard against damage and loss of time occasioned by buckets breaking loose, or being pulled out of shape. The re-inforcing piece extends out upon and is riveted to the ends, as well as to the back, making the former double and the latter triple thick at the corners—where bracing strength is most needed—and effectually preventing the tearing out of either bolt holes or back.

The re-inforce piece is not needed in buckets made of heavy material which of itself is strong enough to break

the bolts with which they are fastened to the carrying belt.

Cut No. 5, of an ordinary square cornered banded



CUT NO. 5.

bucket, illustrates the advantage of the "double thick" and "re-inforced" back, previously described, as well as the merit of rounded corners, which are less liable to catch.

Ordinarily elevator buckets are made of light material that must be necessarily banded, but the experience of the last ten years has clearly demonstrated that the "Salem" is smoother working and consequently more durable, because it is made of sufficiently heavy material to dispense with the use of bands.

The shape and peculiar construction of Salem Elevator Buckets necessitated the building of machinery specially adapted to their manufacture at the outset, and during the succeeding fifteen years improvements and additions were made which enabled the makers to produce them in larger sizes and at less cost. Their customers have had the benefit of these improvements in the reduction of prices from time to time, and now that they have recently completed and are successfully operating several large and expensive machines, newly designed, in the light of their past experience, expressly for the manufacture of Salem Buckets, offer their customers the further reduction in price which the use of these machines affords. The Salem, therefore, is not a high-priced bucket now, although it is claimed to be the ideal bucket of the age, but is claimed to be in fact cheaper than the cheapest, in the long run.

We need hardly add that the Salem Bucket is made by W. J. CLARK & Co., Salem, Ohio, manufacturers of elevating and conveying specialties, and that Thornburgh & Glessner, Chicago, Ill., are the general agents.

DEALING WITH GRAIN WEEVIL.

Some interesting experiments were recently made in India for the purpose of finding a way to protect grain from the attacks of weevil. It had been observed that soft varieties of grain were more liable to weevil than hard, therefore both kinds were used in the experiment. First, grain was sealed up in cans—in the first set with out any preservative; in the second set, a piece of tow charged with bisulphide of carbon, was put in each can with the wheat; in the third set, a taper was kept burning before sealing up, so as to burn up all the oxygen. After two months the hard yellow wheat in the first set of cans was sound, and the soft white weeviled; in the second set the soft white had a few weevils, but it was found that the can was bad and some air had got in; in the third set the results were the same as in the first, because the taper could not burn up all the oxygen.

Next, grain of both kinds was put in gunny bags, heaps and open pits, with and without bisulphide of carbon. In each of these ways of storing no weevils appeared as long as the grain smelled of the chemical. It thus appears that bisulphide of carbon is a perfect preventive, as long as its power lasts, driving away weevils even from grain already affected; also, unless the grain is stored in hermetically closed vessels, the bisulphide must be renewed in about six weeks. This chemical does no harm to the color, smell or cooking properties of the grain, and, having a strong, disgusting smell, it cannot cause poisoning accidents. Careful observation shows that weevils do not originate in the field; the mischief begins in old granaries, where the insects burrow into the walls and floors. The remedy would therefore be to paint the walls of infested places with poisonous paints, besides using bisulphide of carbon. The frequent burning of a little sulphur in the granary, so as to have the air almost constantly tainted with it, would perhaps drive the insects away, but precautions must in that case be taken against fire.—*Farmers' Review*.

BOSTON GRADES OF GRAIN.

The following grading of grain governs all transactions by members of the Boston Chamber of Commerce in this city: Winter wheat—No. 1 white winter shall be pure white wheat, sound, plump and well cleaned. No. 2 white winter shall be white wheat, sound and reasonably clean. No. 3 white wheat shall be fair milling white wheat, not good enough for No. 2. No. 1 red winter shall be pure red winter wheat, sound, plump and well cleaned. No. 2 red winter shall be pure winter wheat, red (or red and white mixed, provided such mixture does not contain more than 10 per cent. white wheat), sound, plump and well cleaned. No. 3 red winter shall include inferior or dirty winter wheat, but not so badly damaged as to render it unfit for flouring, and weighing not less than 55 pounds. Mixed winter wheat shall include winter wheat equal in quality to No. 2, but red and white mixed in excess of 10 per cent. White No. 1 amber winter shall be bright amber color, and in all other respects shall be equal to No. 1 red wheat. No. 2 amber winter shall be bright amber color, and in all other respects shall be equal to No. 2 red winter. Rejected winter wheat: Wheat weighing under 55 pounds, or musty, but not so badly damaged as to render it unmerchantable.

Spring wheat—No. 1 hard spring shall be composed mostly of hard Fife or Black Sea wheat, which must be sound, well cleaned, and weigh not less than 58 pounds to the measured bushel. No. 1 Milwaukee spring shall be sound, well cleaned, weighing not less than 58 pounds to the measured bushel. No. 2 Milwaukee spring shall be sound and reasonably clean, and weigh not less than 56 pounds to the measured bushel. No. 3 Milwaukee spring shall comprise all inferior wheat fit for warehousing, weighing not less than 54 pounds to the measured bushel. No. 1 Chicago spring shall be sound, plump and well cleaned. No. 2 Chicago spring shall be sound, reasonably clean, and of good milling quality. No. 3 Chicago spring shall include all inferior, shrunken or dirty spring wheat, weighing not less than 53 pounds to the measured bushel. Rejected spring shall comprise all wheat fit for warehousing, but too low in weight, or otherwise unfit, to pass No. 3. In case of mixture of spring and winter wheat, it will be called spring wheat, and graded according to the quality thereof. Wheat received in Boston not corresponding with any of those grades will be put in special bins, or graded in accordance with the grade of the market from which it is received.

Corn—Yellow shall be pure yellow in color, sound, plump, bright, sweet, dry, clean, and free from all other grains. High mixed shall be three-quarters yellow in color, sound, plump, sweet, dry, and reasonably clean. No. 2 mixed shall be sound, sweet, dry, and reasonably clean; yellow and red or white corn mixed. Steamer yellow shall be three-quarters yellow in color, slightly soft or damp, but must be cool; or corn not good enough for yellow or high mixed, in consequence of containing a moderate mixture of poor kernels. Steamer shall include yellow and red or white corn mixed that is slightly soft or damp, but must be cool; or corn not good enough for either the above grades, in consequence of containing a moderate mixture of poor kernels. White shall be white in color, sound, sweet, and reasonably dry and clean, and reasonably free from other colored grains. No grade, very damp, unsound or very dirty corn, unfit for other grades.

Oats—Extra white shall be clear white, choice in every respect, and weigh not less than 35 pounds per bushel. No. 1 white shall be white, sweet, bright, clean, and weigh not less than 32 pounds per bushel. No. 2 white shall be seven-eighths white, sweet, reasonably clean, and weigh not less than 29 pounds per bushel. No. 3 white shall be mainly white, reasonably sweet and clean, not good enough for No. 2 white, and weighing not less than 26 pounds per bushel. Extra mixed shall be mixed oats, choice in every respect, and weigh not less than 35 pounds per bushel. No. 1 mixed shall be sound, bright, sweet, clean, white and black or brown mixed, and weigh not less than 32 pounds per bushel. No. 2 mixed shall be sound, sweet, and reasonably clean, white and black or brown mixed, and weigh not less than 27 pounds per bushel. Rejected white shall be dry, and white in color, but unfit for other grades of white in consequence of being dirty or of poor quality. Rejected mixed shall be dry, white and black or brown mixed, but unfit for other grades in consequence of being dirty or of poor quality. No grade: All damp, unsound oats unfit for other grades.

The word "new" shall be inserted in each certificate of inspection of a newly harvested crop of oats, until such time as the committee on grain shall give written notice of their intention to drop the same. This change shall be construed as establishing new grades for the time specified, to conform in every particular to the existing grades of oats, excepting the distinction of "new" and "old."

Rye—No. 1 rye shall be sound, plump, and well cleaned. No. 2 rye shall be sound and reasonably free from other grain. Rejected rye shall include all damp, musty or dirty rye, or rye which from any cause shall be unfit for No. 2.

NEW WHEAT AND OLD RYE.

The harvests are gathered, the fields are all brown,
One more summer's work is complete,
And when the gay farmer drives into the town,
He takes a big load of new wheat.



He eats at the tavern, the streets he does roam,
And divers amusements does try,
And when, late at night, he departs for his home,
He takes a big load of old rye.



GRAIN INSPECTION RATES AT NEW YORK.

The rates for the inspection of grain through the grain inspection department of the New York Produce Exchange have been advanced from 20 to 30 per cent. These rates were reduced several years ago, but the grain committee claim that it is necessary to advance them now, owing to the increased carrying capacity of the railroad cars at present in use. The change took place Monday, Nov. 3.

The new schedule of fees will be:

For inspection and verification of track weights, 50 cents per carload—instead of 30 cents.

For inspection of boatloads of canal grain, \$3 per load—the same as the old rate.

For inspection into regular warehouses, 60 cents per 1,000 bushels—instead of 50 cents.

For inspection out of regular warehouses, 60 cents per 1,000 bushels—instead of 50 cents.

For out inspection and superintending at place of delivery of grain afloat (when requested), 60 cents per 1,000 bushels—instead of 50 cents.

VARIETIES OF WINTER WHEAT.

In response to the query put to crop correspondents as to the varieties of winter wheat which will best withstand severe frost in their several localities, or in other words, which variety had proved hardiest, says the *Palouse Gazette*, the answers received indicate that for frost resisting qualities the red-bearded varieties have taken the lead. The most popular varieties appear to be the Mediterranean, a red-bearded wheat, and Fultz, a smooth red wheat. Of the Mediterranean there are no complaints. A large proportion of the Illinois and Indiana correspondents, where the tests have been the most severe, report that this wheat has endured the winter better than all other varieties planted. The reports are not so uniform in regard to Fultz. In some cases it has held its own with other varieties; in other cases it was badly winter killed.

Among the varieties reported to have endured the winter well, we note the following among the red bearded sorts: Mediterranean, Velvet, Chaff, Seneca, Longberry, Ohio Swamp, Gypsy Nigger, Hungarian, Red Lea, Lancaster, Odessa, and Red Chaff. Of the smooth red varieties the following are reported hardy: Fultz, Poole, Badger, Ontario Wonder, Hickman, Egyptian, Red May, and Oregon. Two smooth varieties of amber grain are said to be hardy, viz.: New Monarch and German Amber. The Clawson, a smooth white wheat, appears to be popular in Michigan. Many Kansas correspondents report in favor of Turkey wheat, but fail to classify this variety, and do not say whether it is bearded or smooth. As already stated, Mediterranean takes the lead in Illinois and Indiana in point of hardiness. In Ohio and Missouri allegiance appears to be divided between Fultz and Mediterranean. In Kentucky, Longberry leads; in Kansas, Turkey; in Michigan, Clawson.

BUFFALO'S GRAIN TRADE.

In spite of the fact that the Buffalo elevator pool has tried strenuously to tax the grain trade of that city out of existence, the receipts for the present year show an increase, and for the last few months do not show the decrease expected in consequence of the short crops in the Northwest.

The receipts of grain at Buffalo up to Nov. 1 were larger than for the same period of any of the four preceding years. The total receipts of grain up to Nov. 1 amounted to 77,072,003 bushels, against 76,244,493 bushels, and 64,688,587 bushels for the corresponding periods of 1889 and 1888. The receipts of grain from the opening of navigation to Nov. 1 in 1886 and 1887 were 63,856,658 and 72,181,886 bushels respectively.

The receipts of grain at Buffalo for the month of October, 1890, show a decrease as compared with the same month of 1889, being 12,599,297 bushels, against 13,934,823 bushels for October, 1889. The receipts in 1886, 1887 and 1888 were 10,429,489, 11,435,146 and 9,467,553 bushels respectively for the month of October.

The flour shipped through Buffalo in October, 1890, amounted to 1,092,432 barrels, which is a large increase over previous years. From the opening of navigation until Nov. 1, 1890, 4,831,543 barrels of flour passed through Buffalo. This exceeds the amount handled for the same period of any other year.

CORN IN THE RED RIVER VALLEY.

W. F. Dalrymple, the great Dakota farmer, has returned from a trip through the Red River Valley highly elated with the state of things on his monster farm.

"The output of our farms," he said, "has been more satisfactory this year than ever before. Threshing is about finished, and the whole valley proper has a very fair crop. The yield of wheat has averaged from twelve to fifteen bushels to the acre, and it is a good quality. I was very much pleased with the corn development I found out there. Heretofore it has been supposed that corn could not be raised there, but this year they planted a variety that had been acclimated in Northern Minnesota, and they have got a good crop. I saw a great many fields of from 100 to 200 acres, and the corn had ripened in all of them. The ears are large, and the kernel is firm and rich. The movement is of the greatest importance to that part of the country. Its success will enable the Dakota farmer to diversify crops, and thus provides against the total failures that have been such hard blows to the people there."

SELF-OILING TRAVERSE WHEEL.

The cut given herewith illustrates the new Self-Oiling Traverse Wheel for the Morton Improved Elevator Horse Power, which was illustrated in our last issue. This is one of the vital points in all tread powers. Heretofore no means other than a small hole bored in the hub of the wheel has been used, through which it has always been very difficult to lubricate the traverse wheel properly, for after a short time the oil becomes thickened and causes the wheel to run hard.

With the self-oiling wheel, upon which a patent has been applied for, the difficulties experienced are entirely overcome. On one side of the wheel is cast an oil pocket which has a small opening where it comes in contact with the cross-rod, and in the bottom of the pocket is placed a fine sponge, which extends through the opening and rests on the cross-rod. The top of the pocket is fitted with a small cork, leaving a large space in the pocket to be filled with oil and thoroughly saturating the sponge. When the cross rod revolves it causes a suction on the sponge, and draws the oil into the journal as required. With the old way of oiling, the dirt and grit collects into the oil hole and causes the rods to cut, wheels to wear out, and power to run hard.

With the old style of wheels, when first oiled the machine runs very easy, but after a few minutes' run careful notice will detect the fact that the power does not work as sharp and good as when first oiled. The oil has become exhausted, the rod dry. Now is the time the power should be oiled again, but the time cannot be taken to do it, and the machine is allowed to run the balance of the day in a dry condition. This is what has caused so much trouble with a tread power. This is overcome with the self-oiling traverse wheel, as it keeps the wheels well oiled all of the time and allows the power to run easy.

The wheels are turned up true in a lathe, and have longer bearings than any other on the market, also the cross-roads upon which these wheels revolve are made of cold drawn steel, as true and round as turned shafting, and are hardened at the ends where the bearings are, so that a file will not file them. This company has made a study of the manufacture of tread powers for years, and especially of powers for elevating grain, and with adjustable elevation for increasing or diminishing the power, guaranteed perfect governor which will give a motion as steady as steam, and run a cleaner without any variation of speed, adjustable self-oiling boxes, always keeping the main shaft in perfect line, case hardened cold drawn steel cross-roads, malleable iron chains, with double the length of bearings of any other made, and steel track for wheels to run on, also the self-oiling traverse wheels, in all producing what they claim to be the best, cheapest and most durable power possible for grain elevators. For further information and new catalogue address the MORTON MANUFACTURING COMPANY, Romeo, Mich.

SELECTION OF SEED GRAIN.

It is a great pity that more pains is not taken in improving seed grain of all varieties. Something of improvement is made every year by our best farmers in the selection of seed corn. Probably no work the farmer does pays him better for the small time required than this. But small grains are harvested with self-binders, and if there be individual plants of much greater excellence than the rest, their seed goes into the grain bin with the rest, and as likely as not is ground or fed to stock. A few years ago Garret Clawson, a Western New York farmer, found in his wheat field near a burned stump some heads of wheat differing materially from the remainder of the field. He saved these, propagated them, and thus originated the Clawson variety of wheat, which has been of inestimable value to farmers in the wheat-growing sections of the country. Usually, however, after a few years these new and improved varieties lose their best qualities. How can it be otherwise, with seed selected as it usually is. The care in selection that originated the variety is equally needed in maintaining it. There is no let up to the general law that whatever is not growing better is probably growing worse.

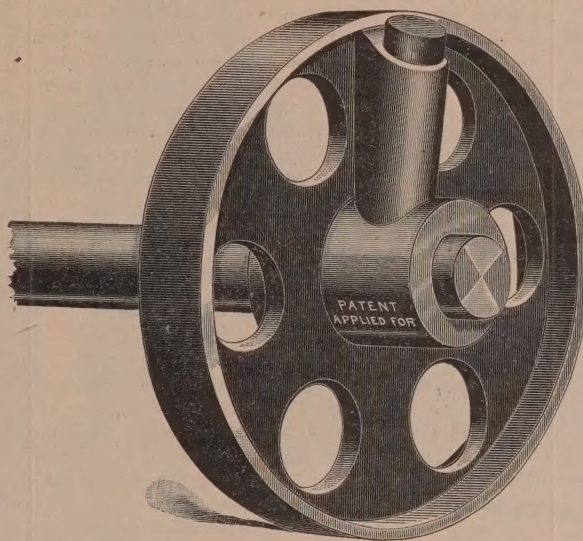
Of all grain the most care should be taken in selecting seed wheat. Every three or four years, and at most five years, seed should be procured from a distance through the local grain dealer and not of a traveling shark.

RUST IN WHEAT.

A Mr. Smith Ellis has recently offered to the government of New South Wales a remedy for rust, for which, if found successful, he asks to be paid £10,000. Rust is one of the most destructive plant parasites of Australia, and the offer has been accepted, and the Minister of Lands and Agriculture has asked wheat growers to give it the widest possible trial. In the meantime the views of the discoverer, the result of long and very careful study and experiment as to the cause, means of propagation, and of avoiding the spread of rust germs are given to the world. He says:

1. Rust in wheat is an internal parasite fungus that constitutionally affects the wheat plant. It is propagated and attains maturity in the sap vessels of the leaves of the plant, and on arriving at maturity bursts forth, rupturing the womb of its foster mother, and at the same instant escapes into the atmosphere in the form of a pale yellow smoke, the thing that we call rust being only the shell or after effect of the parasite.

2. Secondary or Destructive Propagation.—Every wheat grower knows the meaning of "rusty weather"—warm, moist and calm; the atmosphere is heavy, the escaped rust smoke, which is the germs of the parasite, float in the moist atmosphere until they have absorbed sufficient moisture to cause them to settle on the ground or other place, or on the leaves of another wheat plant;



SELF OILING TRAVERSE WHEEL.

if on the latter, they at once strike into it, and recommence their work of destruction by absorbing the sap of the plant and multiplying themselves indefinitely, again bursting upon the skin of the leaf to proceed on another round of destruction. From close observation I have reason to believe that a new generation of the parasite is reproduced in about every forty-eight hours. I mean that the production is continuous in already infected plants, but as regards healthy plants newly inoculated, they produce a new generation of the matured parasite in about that time. I am also of opinion that it is only while the sap of the wheat plant is in a state of "incipient fermentation," caused by the combined heat and moisture, that the parasite is enabled to propagate itself so destructively. This opinion is confirmed by the fact that the work of destruction ceases on the occurrence of a fall of temperature of the weather.

3. Primary Propagation.—The question will arise as to where the "rust smoke" is located, and where to be found after harvest." The shortest answer is this: Anywhere and everywhere in and around every wheat-growing district. The "rust smoke" is endowed with active conditions of life whenever it comes in contact with the plant, in any living shape or form, that produced it, or rather nursed it, and whenever that contact is accompanied by the necessary adjuncts of warmth and moisture, causing "incipient fermentation," the "rust smoke" or germ forth with strikes or rises into its foster mother, which in this instance is the germ of the seed wheat itself, and thus commences the "primary propagation" of the parasite—the hidden secret of nature that has puzzled and perplexed wheat growers for thousands of years.

4. Mildewed Seed.—The writer maintains that mildew, there a very common form of wheat disease, is the condition of affecting the next year's seed wheat in which the

rust spores find their first footing and commence the work of fermentation from which the disease is always propagated. This mildewed seed may not always produce rust affected plants, but if other favoring conditions turn up, the rust is pretty certain to follow.

5. A Natural Test for Seed Wheat.—The human eye is unable to detect any difference in the seeds of wheat; refer them to nature's unerring decision. Open a drill in the garden; if the soil is at all dry, water the drill until it is wet eight inches deep at least. Sow, cover in at once, and watch the blades as they appear above ground. If any of them have been struck by the parasite, they will show a spot about the size of the head of a pin, and the exact color of the common garden marigold, quite distinct from the pale yellow of the blade. If no such spots appear on any of the three first blades, the seed may be depended on as sound; if they do appear, the seed is unfit to be used or sold for seed. Only one spot may appear in this sample; one match starts a bush fire.

6. Signals of Distress.—Those spots are nature's signals intimating that the parasite has primarily propagated itself in those plants. A magnifier shows that those spots are situated in the interior of the blade, and that the skin of the blade on each side is uninjured. Those yellow spots will gradually enlarge themselves and change to a brown color, and on close examination it will be found that the leaf at those spots has lost its vitality—the parasite has entered, with the reaction of the sap, into

the constitution of its foster mother, and will remain there invisible, except the recurrence of the spots on every new leaf, until that mother either withers and dies in dry weather, or lives on until the recurrence of rusty weather permits the parasite to enter upon its secondary propagation, burst forth, and spread destruction wherever it can fall upon a wheat plant to destroy. I am sure that the presence of the yellow spot in the infant plant is unmistakable evidence of the presence of rust in the crop, and had I a crop giving such evidence I would at once proceed to plow it in and sow the land with some other kind of crop.

7. The Means by which Rust is Often Unconsciously Propagated.—(a) Using imperfectly ripened seed; in this case the skin is thinner, and the rust germs penetrate it more easily. (b) Stacking on damp ground promotes the first stage of fermentation. (c) Laying the seed grain on an earthen floor, supposed to be dry, or on boards that lie on such a floor. (d) Sowing on a too dry seed bed; the rust germs are there ready to strike the seed before rain comes. (e) Old seed of any sort infected with rust, if it springs up among good seed, is sure to spread the disease. The reverse of all these conditions will be pretty certain to insure a crop free from disease.

GROWING GRAIN TRADE OF KANSAS CITY.

Kansas City is steadily growing in favor and importance as a grain market. Last month nearly a million bushels of wheat were received here, much of it coming from Missouri points that have heretofore shipped to St. Louis. The average daily receipts of corn for October was about 27,000, and of oats 15,000 bushels. As compared with St. Louis this showing is very favorable. It is considered a big day's business when 75,000 bushels of wheat are received there, and several times during the past month the receipts at Kansas City have exceeded that figure. More than ever before millers are relying upon this market as a source of supply for good milling wheat, and the dealers who handle the milling grades have been doing an excellent business this fall. Probably more corn and oats have been diverted from this market to the South this year than from any other point. Reports from Western Missouri and Kansas show that in all sections the acreage sown to wheat this fall was considerably in excess of that of last year, and the crop was never in better condition to go into the winter. Should fortune favor the Southwestern wheat grower next year as it has this, Kansas City will gain a prestige as a grain market that will make Chicago and St. Louis shiver.—*Modern Miller.*

F. M. Cockrell, Dallas, Tex., says: "We consider the AMERICAN ELEVATOR AND GRAIN TRADE a very valuable journal, and one of great interest to all connected with the grain and elevator business particularly."

A NEW WHEAT FLY.

In Europe oats and barley are injured by a small two-winged fly, one brood of which mines and destroys the central part of young plants, and another destroys the young kernels of grain. It is known there as the wheat frit fly, because, Miss Ormerod explains, the worthless grain which results from the injury are called by Swedish farmers "frits." The fly was long ago named *Oscinis frit* by the illustrious Linnaeus, who also made record of its injurious habit, stating in 1750 that the annual loss from its depredations in Sweden alone reached 100,000 gold ducats. Subsequently Curtis, the British entomologist, described a wheat fly which he thought was different, naming it *Oscinis vastator*, but Miss Ormerod thinks this is the *O. frit* of Linnaeus.

From the accounts of the frit fly given by Curtis and Miss Ormerod it is evident that the insect works on grain much like a small fly which I find in the grub state infesting wheat in Fayette county, Kentucky. In structure and habit, so far as I have observed the latter, it proves so like the European species that it might perhaps be appropriately named American frit fly. It was common last fall on young wheat, and especially so on that growing where the wheat shocks had stood in the summer. The central blades of infested plants generally have the central leaf dead and brown, and when the green outer blades are stripped off, the cavity within them is found to contain only the dead tissue of the plant, and refuse in which the author of the injury—a small yellowish-white grub—generally occurs. The adult flies were first observed during the fall and winter of 1889, being obtained from wheat which was placed in a breeding cage in order to secure from it the early stages of the wheat bulb worm, which does an injury similar to that described. The eggs of the bulb worm were extremely common on this wheat, but only a few bulb worm flies came from it, while many black flies of another genus and species emerged in the cage in which it was kept. This led to a careful examination of the larvæ and pupæ still in the wheat, with the result of finding two kinds present, the smaller and more abundant of which proved to belong to the strange flies. Most of the flies emerged during the fall and winter, but some larvæ and pupæ were in the wheat until spring. It is very probable that most of them would have remained in the wheat all winter had their changes not been hurried by the very mild weather that prevailed.

Since the outbreak among fall wheat of 1889 no injury has been observed to small grain. The adult flies have, however, been common during most of the season, in the spring on wheat and grasses, and later on the latter alone. The pest is probably widely distributed among wheat and grasses in this country. In one of his recent papers as Dominion Entomologist of Canada, Mr. James Fletcher notes the injuries to grasses of a fly which is very probably the one here treated.

LARVA.—Very close in form and structure to the wheat bulb worm. Cylindrical, white, and with a faint yellow cast. Body composed of thirteen divisions. No developed head, no legs. Mouth with two strong black hooks. Hindmost division of the body with a pair of knob-like prominences. Length of specimen in alcohol, .14 inch.

This grub differs from the grub of the wheat bulb worm in its smaller size, yellowish color (the other being pale green), and in the distinct and completely separate protuberances at the hind end of the body. In the wheat bulb worm grub the hindmost division of the body is simply two lobed. Under the microscope another difference is apparent. The first two divisions and the under side of those following are roughened with very fine raised lines directed crosswise of the body in the wheat bulb worm, while in the frit fly grub the first divisions and the under side of those following, in the region of the joints, are roughened instead, with numerous scale-like thickenings of the cuticle, with the hind edge of each thickening finely toothed.

PUPA.—In this stage the insect is inclosed in the skin of the grub, the skin hardened and embrowned to form what is known as a puparium. The puparium is of a bright yellowish-brown color, with distinct and very finely wrinkled divisions. The two knobs of the grub are still conspicuous at the hind end of the body. The black jaws of the grub are moulted with the skin, and may be seen through the puparium lying along the under side. Miss Ormerod mentions a star-shaped structure which she thinks is characteristic of the European frit fly. The obsolete mouth of the grub of the American insect is withdrawn, blackened and wrinkled, producing

what I infer is the same appearance. Length of puparium from .10 to .14 inch.

IMAGO.—A minute shining black fly, large examples of which are about .07 inch in length. The eyes are reddish-brown. The wings have brown veins, and are very faintly smoky. Under side of abdomen pale green. Thighs black next to body, pale yellow at the tips, remainder of legs, excepting the feet and a band on the two hind ones, also pale yellow.

Remedial.—For the European frit fly Miss Ormerod advises the application of a stimulating dressing to the soil as a means of counteracting the injury, or rather as a means of getting a stand of grain over and above that killed by the grubs. The suggestion can doubtless be made of use in case of outbreaks of the American species.

Our insect has thus far proved more abundant on volunteer plants. The greater exemption from injury of the late sown wheat seems to be due to the fact that many of the flies deposit their eggs on the volunteer plants, and disappear before the sown wheat appears above ground. Late planting may consequently be expected to enable farmers to avoid injury during the fall of the year.

Another matter which I am satisfied is of importance in connection with injuries of insects such as this is the destruction in the fall or winter of volunteer wheat and oats with the pests they harbor. In getting specimens of the grain insects for examination I have always found these plants to yield the most. They accumulate on them in some cases in great numbers, the wheat bulb worm, the Hessian fly, the grain louse, and the American frit fly sometimes occurring on the same plants. If such plants can be destroyed, they form a bait to attract pests from the sown grain. If they are permitted to grow during the fall and winter, they are an encouragement to the insects and a menace to the wheat the next spring. Further suggestions as to remedies cannot safely be ventured until we know the full life history of the pest.—*H. Garman, Entomologist and Botanist, in Report of Kentucky Experimental Station.*

THE WHEAT SITUATION.

BY R. JAMES ABERNATHEY.

For some time past the great American bear speculator has been very busy in an effort to depreciate the price of wheat. How long he may continue that line of operation, or how soon he may be suddenly transformed into a most ferocious and aggressive bull, is entirely problematical, and past the ken of ordinary mortals.

It might as well be admitted in advance that there are some chronic bears that are never transformed. They are destructionists by nature, and stand in the same relation to mankind in general that the vulture and carrion crow do to the feathered kingdom. They fatten and thrive on death and decay. When men are groaning under a load too great to be borne, the bears jump on them with both feet, thus adding to the burden and increasing the misery, and they tramp and pound in hilarious glee while yet a glimmer of life remains, or until the bulls, with new steel tips on the points of their horns, bring them up with a round turn, and send them high in the air, as they sometimes do. This ought always to be done when the bears are at their nefarious business of tramping a lifeless market, or of forcing prices already too low to a still lower level. At all such times corners are justifiable, if only the crafty chronic bears could be caught; but as a rule they make their escape after the first loss, and leave their ignorant followers and dupes to hold the bag. The chronic bear is both a vulture and a coward that runs to cover at the first note of alarm.

However, at this writing, chronic bears are not in control of the market; it is the other animal, with both hoofs and horns concealed, like Mephistopheles in Faust, that is now engaged in trying to scare the legitimate owners of wheat out of their holdings. It is true they may get tired of the contract, and throw off their masks before this catches the eye of the reader; nevertheless, it is well enough to briefly glance at the real situation. They tell you that the crop of the world is large, and our surplus will not be needed. The real fact is that the world's crop of wheat is not above a good average. No evidence can be produced to prove that it is more. On the contrary, much good evidence exists to prove it below a good average.

Then they tell you Great Britain will not buy our wheat at present prices. Of course she will not, nor would she at the price so long as she is supplied. Great

Britain never buys largely for the first two or three months after her own crop comes in; nor does she buy much so long as she can obtain supplies from other countries more anxious to sell than Americans need be. But she has always had to come and buy before the year rolls round, and it is perfectly safe to say that she will continue to do so for at least several years to come. Great Britain's refusal to buy is simply a bluff that need alarm no one.

But after all, as the situation at home now stands, what need American holders of wheat care for the temporary situation abroad? Let us briefly glance at it: In 1880 we produced a crop of 498,000,000 bushels of wheat, and for the year ending June 30, 1881, exported 186,000,000 bushels, leaving us 312,000,000, or about 6.2 bushels per capita of our population. We all know something about the course of values during that period. During the whole of the year 1881 cash wheat did not drop below 95 cents in Chicago.

This year's crop will, by final estimates, not exceed 400,000,000 bushels. It is doubtful if it quite reaches that figure. Singularly enough, that furnishes us a per capita supply of 6.2 bushels, or the same as we had left of the 1880 crop after exporting 186,000,000 bushels. Are we liable to use less wheat in proportion to population now than then? It does not seem likely. We have as good appetites now as then, and we use wheat for as many other purposes. But mark you, we do not retain that 6.2 bushels per capita, because we have already exported over 30,000,000 bushels, and it is perfectly safe to predict that even though Great Britain does not want any more of our wheat, that we will export in all during the crop or fiscal year at least 75,000,000 bushels, if we have it to spare, which will leave us of this year's crop less than 5 bushels per capita for bread, seed and all other purposes. If we utilized or kept out of sight 6.2 bushels per capita in 1880, it certainly ought not to be much of an undertaking to do the same with less than 5 bushels per capita.

In view of these facts, is there any real occasion for alarm among the real holders of wheat? Allow wild speculators to rant and tear around as much as they please, but keep the facts before you, and be cool. It might be contended as an offset to these statements that we carried over this year a larger stock from the crop of last year than was on hand at the beginning of the crop year in 1880 out of the crop of 1879. However, the facts do not warrant such an assumption. If we deduct from the crops of 1878 and 1879 the exports from the two crops we find just about 5½ bushels per capita left for home consumption out of the crops of those two years. In making the same calculation for the past two years we get substantially the same result, that is, about 5½ bushels per capita for home use, and in that respect we are even. Again, we find there were 19,000,000 bushels in the visible supply on Nov. 1, 1880, and it is doubtful if the visible will much exceed that this year, including the large stocks in Minneapolis, which were not in the visible supply of 1880.

With about three-fourths of a bushel per capita less than the lowest of previous periods in the past quarter of a century, wheat ought to be considered good property by all legitimate holders of the stuff. It means a relative shortage of about 50,000,000 bushels in this year's supply, and if it does not also mean the wildest and most exciting wheat market toward the close of the cereal year witnessed in many years, it will be very strange.

THE OAT CROP.

The margin between the early options and May oats in Chicago is widening daily. It is something remarkable how exceedingly bullish Chicago has suddenly become on oats. The crop of the country is 535,000,000 bushels, against 751,000,000 bushels in 1889, 701,000,000 bushels in 1888, 659,000,000 bushels in 1887, and 624,000,000 bushels in 1886. But the year's crop, except in Kansas, is very poor in quality as well as in quantity. It is said that the oats now being received in Chicago, instead of weighing 32 pounds to the bushel, run as low as 22, and do not average better than 25. That makes a great difference to all consumers—horse feeders as well as oatmeal men. The result will be practically to reduce the crop over 26 per cent. from the estimate announced in measured bushels. That would reduce the crop from 550,000,000 measured to about 435,000,000 commercial bushels.—*Kansas City Star.*

SPEAKING OF CORN.

Among the many special mill machines built by The John T. Noye Mfg. Co. of Buffalo, N. Y., one of the oldest and most reliable is the Niagara Corn Sheller—a machine that by effectiveness of design and solidity of construction should commend itself to the discerning miller. It is composed of an outer cylinder of cast iron, with a cast-iron bottom. The vertical side of the cylinder has ribs and teeth on the inside. Within these is a revolving cylinder or cone, also of cast iron, filled with teeth. This cylinder can be raised or lowered by means of a graduating screw or hand-wheel, as shown in the cut, thus adjusting it in a moment to ears of any size without stopping the machine. The sieve is driven by a round belt from the spindle. There is nothing to wear out or give way prematurely. The corn is thoroughly cleaned from the cob, leaving not a kernel. It is separated from the cobs and cleaned from all chaff and dirt. The cobs are almost all unbroken. Motion of sheller, 200 revolutions. Motion of shaker, 500 vibrations. Capacity, 500 to 1,500 bushels per day. Price, reasonable.

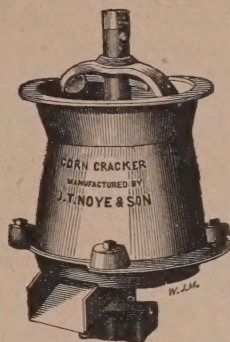
Another standard machine built by this company is the Noye Corn and Cob Cracker or Crusher. One of our illustrations shows the crusher alone, consisting of an outer shell and a core, with a close bottom and a spout. The other represents it in a portable frame, with hopper and driving mechanism complete. The plain crusher can be driven from above or below, and is readily secured to any convenient driving shaft. The mounted one is designed for the use of parties who prefer to buy it ready for putting in motion. The Noye Crusher, being made of chill-hardened cast iron, is very strong and durable. Besides, it is efficient and low priced. At its best motion, 150 revolutions per minute, it has an easy capacity of 30 to 40 bushels per hour.

Now is the time to order, in anticipation of the corn harvest. Superior machines, satisfactory prices, and prompt delivery guaranteed by The JOHN T. NOYE MFG. CO., Buffalo, N. Y., who are also prepared to supply anything in the miller's line, from a complete flour mill with engine down to a bolting-cloth patch.

ELEVATOR MEN LOSE.

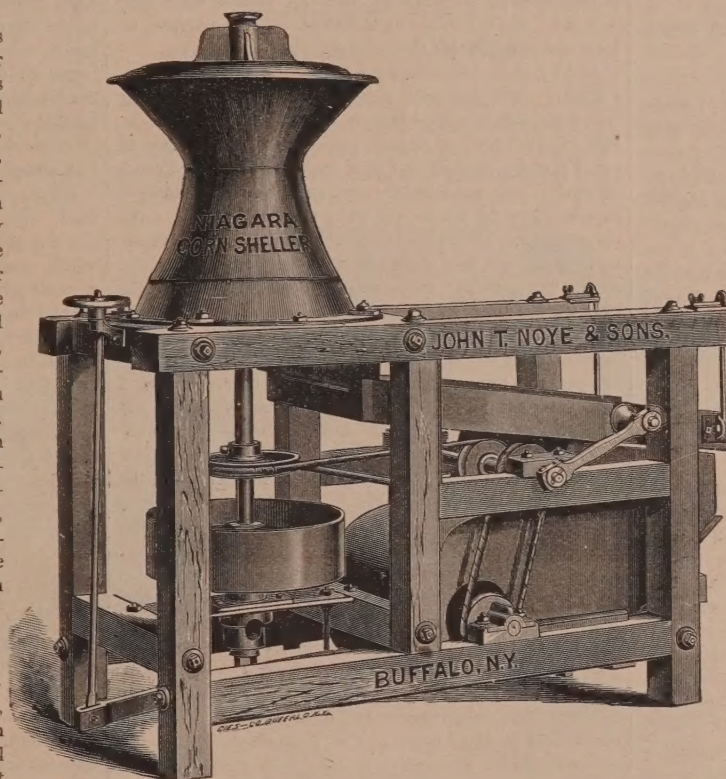
A recent dispatch from Jamestown, N. Dak., to the St. Paul *Globe* says: The elevator men who worked a cute scheme last spring to sell farmers a lot of poor stuff for seed wheat at a fancy price, are now getting worried about their pay. The Miller Seed Wheat Commission, which undertook to do the elevators' work under the guise of common humanity and patriotism, with a warm-hearted affection for the farmer, has issued a private circular to the farmer, who was compelled to get his seed under the conditions imposed. This circular is first an appeal to the grangers to pay up. The mortgage and other security are known to be worth little or nothing. The circular proceeds from a supplication to a threat. Evidently the scheme is not panning out as well as the originators intended. Poor seed has been sold as No. 1 hard. The kick ought to have been made when the seed was taken, but the majority of farmers took what they could get, under the impression that nothing better was intended, and even refuse seed was better than none, while many never had time to exchange or kick, as the delivery was delayed until early spring. Many farmers have got little or nothing to pay back this year. There were nearly 7,000 bushels of this seed put out in this county alone. The lien covers all grain raised from the seed, and the circular threatens to prosecute and punish any farmer who attempts to dispose of any grain without first returning the seed, or who may hold it for a higher price. The plan is to force the farmer to sell and pay \$1 a bushel for what was generally poor wheat, when good, clean wheat was worth 76 cents in the market at the time. The circular first blows hot and then cold. It says if the farmers are good and pay up they may be accommodated again by the same parties, probably, and on the same terms. It is doubtful if any farmer gets into the same trap again if he can help it. It looks as if the elevators and the committee would be called upon to demonstrate their professional interest in the welfare of the state and

the human family by standing a pretty heavy loss, notwithstanding the percentages they had to make money in the game. The guaranty of the liberal subscribers in



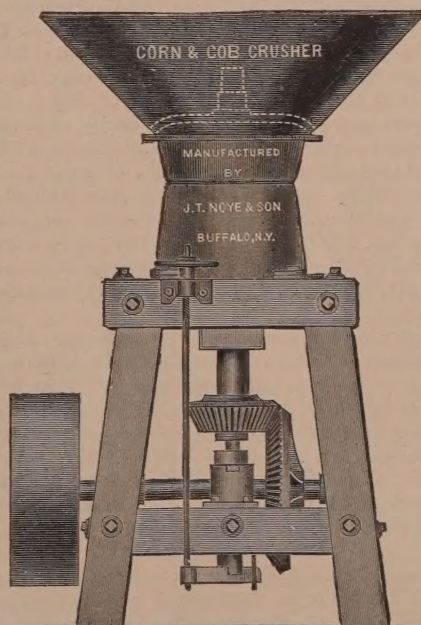
THE NOYE CORN AND COB CRUSHER.

Minnesota and a few in North Dakota will have to be drawn upon, and if not bogus altogether the outcome



THE NIAGARA CORN SHELLE.

will be watched with interest everywhere, to see if the guarantors come to the scratch. The probabilities are



NOYE CRUSHER WITH HOPPER AND FRAME.

that most of the guarantors are bloated stockholders in the elevators and pay themselves. The others, not publicly known as in the ring, doubtless "stand in," and will

not be called upon to put up. On receipt of this circular one farmer was overheard to exclaim here yesterday: "To h—l with their seed wheat. Charity begins at home this year. Have nothing to pay back with anyhow. The wheat was poor stuff, and the oats we sowed came up nothing but wild mustard. If the hail had not struck and killed them the whole neighborhood would have been covered with wild mustard. The Lord seems to protect us sometimes, after all. When I get a crop, and can afford it, I will pay back the seed, and not till then." There is little doubt that the same sentiment exists among many farmers in other parts of the state.

BUCKET SHOPS STILL OPEN.


So little is said about the bucket shops these days that the public may conclude that no such places exist in connection with the Board of Trade. This is far from being true. The great and only Murphy still conducts the greatest bucket shop on earth. He employs a larger force of telegraph operators, clerks, bookkeepers and cashiers than any two commission houses in Chicago. He fills orders by wire at almost every tick of the clock, and his place is full all day long with those who trade or watch the drift of the markets on his boards in the Rookery. Where does he get his quotations? From the Board of Trade. How does he get them? Only Murphy or a mind-reader can tell.

The efforts which have been put forth by President Baker and the Directors of the Chicago Board of Trade have been well directed and untiring. The search by day and night, Sunday, week-day and holiday has been persistent enough to unravel any other secret but this—the wire over which Murphy gets every price made on 'Change. Not only were the official quotations cut off from the world, the telegraph companies hustled from the floor, private wire houses put under restrictions to send prices only at intervals, all blackboards in commission houses sponged off and taboed, but a system of espionage has been kept up of which the public and many of the members knew nothing. Two experts were needed for the underground work, an electrician and a telegraph operator. The Room Committee, headed by Mr. Steever, secured for the work F. J. Brennan, formerly electrician for the telephone company, and J. J. O'Brien, the official reporter for Secretary Stone, formerly manager for the Baltimore & Ohio Company on the floor. These two worked every wire, tapped everything high and low, in the air and under the street. It was this sort of investigation that detected the wire running to the "crib" pool-room in the lake and informed the city authorities. In spite of all this Murphy has the correct quotations and does business on them, and it is said furnishes the smaller bucket shops.

BUSHELS OF DIFFERENT PLACES.

Dr. Franklin B. Hough, formerly superintendent of the New York state census, published several years ago a curious table showing the number of pounds avoirdupois in a bushel of various commodities as determined by custom, and finally by legislation, in different states and territories in this country. He found four different bushels of corn, four of rye, five of barley, seven of oats, and seven of buckwheat. These measures differed so widely that 1,000 Kansas bushels of barley, at 48 pounds to the bushel, would become 1,500 bushels in New Orleans, where 32 pounds answered the same name, and 1,000 Kansas bushels of rye, at 56 pounds, would become 1,750 bushels in the same market. Dr. Hough entered upon this inquiry for the purpose of reducing farm statistics to a uniform standard. On comparing other units of measure as established by law, he found remarkable discrepancies in the measurement of staves, lumber, shingles and other forest products.

The amount of flaxseed in the Chicago elevators at the close of business Saturday, Nov. 1, was 1,320,880 bushels. On the Saturday previous there were 1,320,132 bushels.



COMMUNICATED

[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interests of the trade at large, or any branch of it.]

LOST HUNDREDS.

Editor American Elevator and Grain Trade:—Inclosed please find \$1, for which you may book me as a subscriber to the AMERICAN ELEVATOR AND GRAIN TRADE for one year. I allowed my subscription to expire a year or two since, and probably have lost hundreds of dollars by not renewing at the proper time and not being a reader of your journal this year in particular.

Yours truly, R. W. LAWRENCE.
Pocasset, Mass.

MINNEAPOLIS INSPECTION.

Editor American Elevator and Grain Trade:—I notice a good many complaints against state inspection at Minneapolis this year, which I think is unjust. I have bought wheat five years at this point, and I think the inspection so far this season has been as lenient as ever before. The trouble is a good many country buyers started in too high, and when they had to come down it discouraged the farmers. Inclosed find \$1, for which please send me the AMERICAN ELEVATOR AND GRAIN TRADE for one year, and oblige

Yours truly, JNO. R. GIBSON.
St. Thomas, N. Dak.

MANIPULATION OF THE FLAX-SEED MARKET.

The Linsced Oil Trust seems to be running the flaxseed market to suit itself, and is bleeding country merchants unmercifully. The Chicago Journal of recent date says:

Two gentlemen who have done a good share toward building up the flaxseed business on 'Change expressed themselves in no uncertain manner when reviewing the unusual action of the trade of late. The first remarked: "Flax is again on the up-turn after a 16-cent break. Since the season opened there has been a net advance of 38 cents, until \$1.56 was paid for flax, the 16-cent break following immediately. This 38-cent advance has been in the face of a good crop, heavy receipts, accumulating stocks until over \$2,000,000 is now tied up in seed in our public elevators alone, to say nothing of what may be in mills and private houses. This advance has been unreasonable and unwarranted by the market value of the products, and has been attended by a light and very unsatisfactory trade in futures, while the purely speculative feature has almost entirely disappeared, and another year will see its utter extinction and very much reduced operations in futures."

The other gentleman was indignant and said: "Never in the history of the trade has there been such a 'stand-and-deliver' policy pursued as has been this season, and if carried much farther we will see no trading for future delivery, except when the seller knows absolutely that he will fill the sale by country shipments. The Linsced Oil Trust is mainly responsible for this unsatisfactory market, and unwillingly country dealers are aiding them, and in this way: When they first began to contract the crop from the farmer they sold for future delivery here as a hedge, then instead of shipping to fill their sales, they sold their flax on track at home, saving just about the commission. They would then either let their sales here stand or order them covered a day or two after, and as we have had an active and rising market the operation would prove a losing game. And commission men's books will show many such deals closed with a 10 to 20 cents loss, when the seed originally intended to fill the sale was sold on track at a profit of 2 to 5 cents. The trust has caught these dealers at both ends of the line. They have been heavy buyers for future delivery, from the start, and have had the market short all the way up. They have also been bidders for seed on track at every flaxseed station in the country. Every few days we would have a rush of country orders to buy against their sales. They were short to the trust here. The trust had bought their

seed in the country, and the trust could dictate the price at which they could cover here, and it is safe to say this price was generally several notches above the price they got for the seed on track at home. In this way our market has been forced to what is generally considered by the trade an unnatural figure. The trust continues the milking process. As soon as one batch of shorts are in they withdraw their bids in the country for two or three days, and offer freely here and break the market. Country dealers think the price high, and track bids being withdrawn hedge by selling again, and a new line of shorts are ready to walk into the monopoly's net. With this condition of affairs there is no use in predicting the course of the market, as it all depends upon how often the country dealers will repeat the operation. Our receipts have been heavy, for only a small portion comes on the open market, showing that the bulk of the receipts come to track buyers, giving them the control of the cash end, and in that way putting the speculative market under their thumbs. The shipper will find before long that it will be to his advantage to either not hedge his country purchases at all, or when he does sell against them ship in to fill. He will then be independent of a narrow, almost one-man market."

A third party who was drawn into the discussion concluded: "The day will surely come when the shipper will find himself completely at the mercy of the trust, and will sigh for the broad and open market where he could protect himself by sales and purchases of future deliveries, with a reasonable assurance that he would have an even show for his money when the time came to close his contract. Throw the flax on the open market, thereby inviting all the competition there may be from the trust. Independent mills, shippers and speculators will then have a market where it will be safe to place a hedge. Rest assured the trust would not be a country bidder if there was not an advantage to be gained from an open market, and this advantage reaches farther than the 1-cent commission that the seller apparently saves. It reaches into the future when they shall have killed off speculation. The open market made so narrow that a very few can control it—track selling a necessity and the trust holding the key to prices. Should every shipper sell his seed on track, how long would we have a market here, and without our market as a guide to prices in what kind of a position would the trust have country dealers? Hardly a day passes now that shippers do not win some commission house for the price at which the bulk of the seed has sold before settling with agents of the trust on their track sales that day. There is a great deal more to this subject which country shippers should investigate before putting themselves and their natural market so completely in the hands of the gigantic monopoly, as they have so far this season."

IMPORTS OF BREADSTUFFS.

The imports of breadstuffs into the United States during September were valued at \$1,108,664, against \$153,817 for September, 1889. Breadstuffs valued at \$3,731,218 were imported in the nine months ending Sept. 30, against \$3,310,285 for the same period of 1889.

The imports during September of barley amounted to 1,675,019 bushels; of wheat 336 bushels, against 236,109 bushels of barley and 5,780 bushels of wheat for September, 1889. The increase of more than 700 per cent. in the importation of barley in September over that of September, 1889, was due to the duty imposed by the McKinley Bill. The importers rushed in all the barley they had before Oct. 6, to escape paying the increased duty.

During the nine months ending with September 6, 1891, 470 bushels of barley valued at \$3,505,319; 1,305 bushels of corn, value \$896; 12,010 bushels of oats, value \$5,816; 132,742 bushels of rye, value \$76,744, and 149,415 bushels of wheat, value \$37,508, were imported, against 5,290,394 bushels of barley, valued at \$3,177,719; 1,850 bushels of corn, value \$981; 12,142 bushels of oats, value \$5,766; 4 bushels of rye, value \$2, and 8,528 bushels of wheat, value \$7,693, for the same period of last year.

As an evidence of the tendency to increase the production of flaxseed in the Northwest, it is found by aggregating the receipts in Minneapolis for September and October this year and last, the arrivals are 480,000 bushels for the two months of this crop year, against 250,000 bushels for the two months last year, showing 96 per cent. increase this year.

POSSIBILITIES OF RYE.

Rye is a grain that has long been more neglected than any other, excepting perhaps buckwheat. It is emphatically the crop for poor land and poor farmers, yielding something where wheat would be an entire failure. The result is that the crop supposed to bear most neglect gets the most. It is sown on poor land, poorly prepared and with less manuring than any other. Then, too, unfortunately for the rye crop as a grain, its straw is very valuable. As usually grown, rye straw in bundles is worth more than the grain threshed from it.

Yet, when grown by good farmers on good land, rye has developed possibilities that those who only knew it as a starved, neglected plant can scarcely have realized. We were passing by a rye field some time ago that stood uniformly nearly six feet high, and with long well-filled and drooping heads of grain. If we do not misjudge, this rye must have yielded forty and perhaps fifty bushels per acre. Going to the border of the field we selected three of what appeared to be the best heads. Rubbing out the kernel from the chaff we found respectively eighty-four, seventy-five and seventy-four grains in each. These three heads, and perhaps two or three more that were not so large, stood half a foot above their neighbors, and undoubtedly all come from a single seed. If so, it represents the great yield of 233 grains from three heads, and all from one seed. But that was probably not all the stalks that the one seed produced.

All through Continental Europe rye is the staple cereal food. Rye bread is not only cheaper than wheaten bread, but it is preferred, at least for a change, by many. The whole grain of wheat may contain more bone and strength-giving nutrition than rye, but the latter is always ground more coarsely, and makes a bread sweeter and more nutritious than that from fine wheaten flour. We believe in wheat as food for men, to give strength both to mind and body. But what is the advantage of wheat if its most nutritious portions are left out and reserved for cattle feed? Rye bread is better. Its sweetness in the mouth is due to the easy digestibility of its starch, which is quickly changed to sugar by the saliva which a vigorous appetite always provides for food when it is placed in the mouth.—*American Cultivator.*

THE FLAX INDUSTRY.

The introduction of machinery to make binding twine from flax fiber, at the state's prison, Stillwater, Minn., is proving a stimulus to the flax interests of the state, says *Farm and Home*. Mr. G. Y. Smith has invented and patented a machine for threshing flax that takes out all the seed and leaves the straw straight, even and unbroken. It is also claimed for the new machine that the seed is not cracked or injured as by an ordinary threshing machine. A company has been organized to manufacture the flax thresher, a machine for scutching flax straw cut and threshed in the usual way, a new and cheap twine machine (that they claim can be operated by a boy or girl and will make 400 pounds of twine per day); also a flax pulling machine. Mr. E. Bosse of Ramsey county, who is a successful flax grower, was present at the trial of the thresher, and was much pleased with its work. Mr. Bosse is enthusiastic regarding the possibilities of flax culture in this country. He exhibited some specimens of fiber grown last year that was very fine, strong and of good length. Mr. Bosse says: "I had eight acres of flax last year. Pulled it by hand and worked it into fiber ready for market. A man can pull an acre in three days. It should be pulled just as it begins to turn yellow. That which was pulled first made the best and most fiber, but did not yield so much seed; we were three weeks pulling it; the first gave six bushels of seed, the last ten. The fiber from the first was worth 14 cents a pound; from the last or ripest it was worth only 8 or 9 cents per pound; the increased value of fiber in the first more than made up for the loss of seed. The fiber from that which was pulled first was finer and stronger than the other. The yield of dressed fiber ready for market was 600 pounds per acre; the average price 12 cents per pound. The Belgian flax was the best, the fiber being much finer and better than Dutch or Russian, although Russian gave the best yield of seed."

Those connected with the trade who are not subscribers will please send us their subscriptions by first mail.

EUREKA DOUBLE RECEIVING SEPARATOR.

This machine is offered by the manufacturer as being decidedly worthy of thorough examination by millers and elevator owners, as it most thoroughly and satisfactorily meets a want long experienced and illy supplied until he brought out this machine. It is designed for use in locations which will not permit of the employment of his regular warehouse separator, described in these columns last month, by reason of the latter requiring greater height between floor and ceiling, and this feature constitutes the prime element of its desirability, as in its operation it can only equal, not excel, the perfection of the warehouse separator. In operation it is absolutely dustless, and for every requirement of the elevator or warehouse it is most excellently and perfectly adapted. The first separation is made before the material passes to or reaches the first screen, the fan absorbing and carrying off at once a large amount of light stuff, chaff, straw, and all the dust. The material now falls on a scalping screen, by which it is freed of heavy sticks, straws, headings, etc., an operation of material and great advantage, as will be readily understood, before the grain passes to the main or separating screen. The screened grain passes into a wide separating leg, dropping through a strong air suction which removes much of the shrunken grain, chaff, smut, etc.

With this machine is supplied a cockle screen, which, like the wheat screen, is interchangeable. The arrangement for feeding is, as in the regular Eureka Warehouse Separator, automatic, and the machine is strongly recommended as being economical in cost and efficient in operation.

The machine here described is built in seven regular sizes, each of which has automatic feed, ranging in capacity for handling from 100 to 2,400 bushels of grain per hour, while machines of this type are in use having capacity for handling as high as 4,000 bushels per hour. The work of the smaller sizes is just as efficient and satisfactory as is that of the larger sizes.

The interested reader should correspond with the manufacturer, S. HOWES, sole proprietor, the Eureka Works, Silver Creek, N. Y., for further information.

GRAIN IN WASHINGTON.

"The big crop in Eastern Washington and Northern Idaho are likely to remain in warehouses several months before they can be hauled away," said James Albright of Sprague, Wash., who recently arrived in Chicago.

"A great scarcity of cars, rendering it impossible to move the grain. There is not half enough on cars either of the two roads to haul even a part of the big crops. The wheat yield this year has been immense, especially so in the Pelouse county, the Big Bend Empire, Indian Prairie, and Potlach region. In the Palouse Valley alone the yield is estimated at 10,000,000 bushels. The combined output of these other localities will easily aggregate 7,000,000 bushels, making a total of 17,000,000 bushels for that region alone. Some of it, say one-fifth, will be consumed in Washington; the remaining 13,000,000 will be exported. Estimating that each car will hold on an average 39,000 pounds, upward of 27,000 cars will be needed to export this grain. A train will average 15 cars, so that at least 1,800 trains will be necessary to haul the grain produce alone out of the country to market. Now both the Northern and the Union Pacific railroads are already taxed to their utmost capacity. Calls are daily made from many stations for more cars, which cannot be supplied. In Spokane the yards are almost bare of empty cars, and the same is true of other railroad centers.

"Many capitalists are building large elevators in consequence. It will be a good investment, for the full acreage has by no means been reached in the Pelouse country. In addition to the grain crop, the fruit yield throughout Washington this year has been extraordinary. Thousands of bushels of plums and peaches were raised. Much of it was shipped East, but the shipping of fruit is nearly over. The hop crop is also excellent."

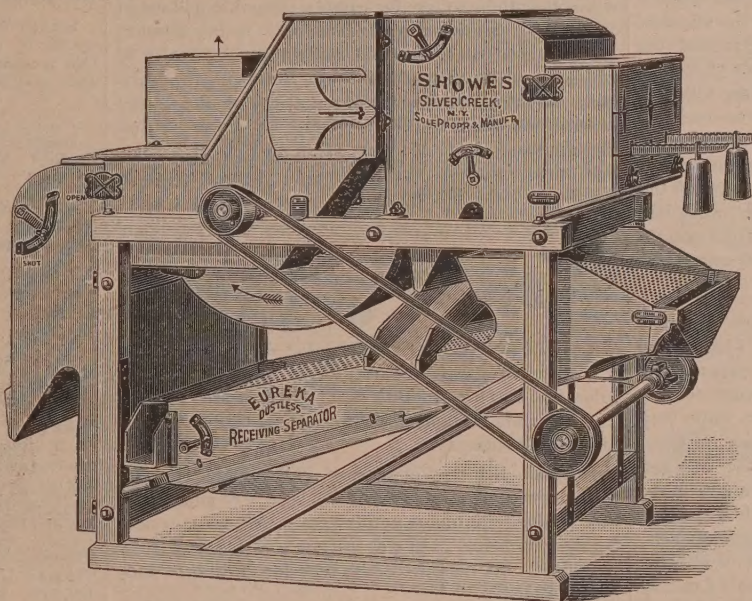
He didn't "feel his oats," but it was his rye.

JAPANESE BUCKWHEAT.

A Pennsylvania correspondent of an exchange says: "When Japanese buckwheat was introduced as something new, I was one of the first to try it here, and from one bushel of seed had fifty-one bushels of clean buckwheat. At that time the millers here were anxious to buy it in order to sell it for seed. They ground it, tried it and were satisfied. My fifty-one bushels was all sold for seed, and the crop the next year mostly went for seed. Now nearly every farmer has Japanese buckwheat. This fall when I inquired at the different mills for the price of buckwheat, I was told 50 cents for good and 40 cents for poor per bushel of 50 pounds. Inquiring what was meant by poor buckwheat, I was told it was the new kind, which did not make so good a flour as the old black buckwheat, and was poor in general. I should be much pleased to hear whether this statement of the millers is really so, and if Japanese buckwheat grown in other sections commands a lower price than the common buckwheat."

BROOM-CORN GROWERS.

Reports have been received from Mattoon, Ill., recently, to the effect that Central Illinois broom-corn raisers have had their thinking caps on for some weeks past, and as a result it is probable that some large warehouses will be built on the combination and assessment plan. Having



EUREKA DOUBLE RECEIVING SEPARATOR.

grown suspicious of the middlemen the raisers are canvassing for subscriptions to a fund which is to be used first to erect large warehouses, and secondly to make safe advances on good brush stored in bond to the officers who are to be chosen to manage the business, to the end that no small raiser may be unjustly pinched for means to harvest his crop, and prevent his selling at sacrifice figures.

It is proposed to erect warehouses in Arcola and this city with sufficient capacity to provide for the storage of a considerable portion of the annual crop. The straw which it is alleged broke the camel's back was the finding of letters on file in Eastern broom-corn markets from local Illinois buyers importuning the wholesale men to hold off and let the farmers sweat, as they could in a short time buy the brush for less money than the figures at which the market opened when the new crop was ready to ship. The opening figures ranged well up toward \$100 per ton, but the bear movement soon forced the price down \$20 or more and sales have been very slow. Farmers who have taken their crop to Eastern markets upon their own responsibility found several such letters as are referred to above, and heard of others having been sent from this section, all with bearish intent, and, the facts having become known, the movers in the warehouse scheme have redoubled their efforts and say they are meeting with good success.

Mattoon has a large private broom-corn warehouse and manufactory, which is handling lots of brush and turning out large quantities of brooms, while smaller warehouses serve for the handling of limited amounts; yet there is not one-tenth the storage room which the volume of the

crop demands, and a number of new warehouses would undoubtedly prove a great advantage to the men who raise the brush that sweeps the world.

PRICE OF GRAIN IN 1741.

The report of the grain market in the first issue of the *Birmingham Gazette*, Nov. 16, 1741, shows that in those good old times grain producers who sold their products in Great Britain did not receive such marvelous prices.

Wheat was quoted at 24 to 27 shillings per quarter of eight bushels. This would make wheat worth 75 to 85 cents per bushel. Rye was quoted 16s. to 17s. per quarter; barley, 14s. to 18s.; oats, 12s. to 14s., and peas, 20s. to 28s.

NOVEMBER CROP REPORT.

The November returns to the Department of Agriculture of rates of yield per acre make the average for corn 19.9 bushels; potatoes, 57.5 bushels; buckwheat, 14.5 bushels; hay, 1.20 tons; tobacco, 718 pounds.

The corn crop makes the smallest yield reported, excepting only that of 1881, which was 18.6 bushels. That of 1887 was 20.1 bushels. It is 83 per cent. of the average of the last ten years, a period which included four unusually poor years, and only 73 per cent. of last year's crop. The indications of recent returns have been so uniform that the estimate for permanent record will not be likely to change this figure, except by a slight fraction.

The decline of the last decade is not due to impairment of fertility, but to unfavorable meteorological influences. The highest rates are in New England, as usual. New York averages 25.3; Pennsylvania, 27.5; Ohio, 20.7; Michigan, 26.7; Indiana, 24.3; Illinois, 25; Iowa, 26; Missouri, 25.8; Kansas, 11.3; Nebraska, 20.3. The principal decline is in the corn surplus states.

The average rate yield of potatoes is 57.5 bushels. The condition of the crop in October was lower than in any reported previous crop, except in 1887, being 61.7, against 61.5 when the rate of yield was 56.9 bushels per acre. It imports scarcity and warrants high prices. The low rate of yield of principal states are as follows: New York, 62 bushels; Pennsylvania, 68; Michigan, 58; Ohio, 46; Indiana, 37; Illinois, 30; Iowa, 48; Missouri, 39; Kansas, 28; Nebraska, 27; Minnesota, 68; Maine reports, 95; New Hampshire, 90, and Vermont, 95.

The yields of the hay crops are large as a rule throughout the country. The cane sugar crop will be a large one, and sugar beets have done well west of the Missouri, indicating a probably rapid development of the sugar industry.

WHEAT RECEIPTS AT PRIMARY MARKETS.

The total receipts of wheat at the nine primary markets herein named from June 28 to Nov. 8, 1890, were 53,542,000 bushels, against 63,416,000 bushels for same period of 1889, and 55,543,000 bushels in 1888. The receipts of wheat at Chicago, Milwaukee, Minneapolis and Duluth amounted to 34,184,000 bushels, against 43,477,000 bushels for same months of 1889, and 31,305,000 bushels in 1888. There was a notable falling off in the receipts at Chicago, the decrease being 45 per cent. The other points have also suffered a decrease, but not so large a per cent. as at Chicago.

St. Louis, Toledo, Detroit, Kansas City and Cincinnati received from June 28 to Nov. 8, 1890, a total of 19,358,000 bushels of wheat, against 19,939,000 and 24,238,000 bushels for the same period of 1889 and 1888 respectively. The Kansas City receipts of wheat increased more than 200 per cent. over those of last year. On the other hand, the receipts of wheat at Detroit, and especially Cincinnati, have continually decreased.

S. H. Mitchell, grain dealer, Troy Hills, N. J., says: "I think the *AMERICAN ELEVATOR AND GRAIN TRADE* very good; I have tried for some time to get such a journal."

Queries and Replies.

Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.

No. 33. Grain Dealers' Association.—Will some one please inform me if the Grain Dealers' Association of Southeastern Kansas is still in existence? If so, who are its officers and what are their addresses?—KANSAS SHIPPER.

No. 34. Reply to Query No. 30.—It is not the practice, I believe, of the Chicago elevators to dock from the weights of carloads of grain to allow for future shrinkage, as is practiced at Minneapolis and Duluth. At these points the inspector designates how much the grain shall be docked to allow for shrinkage of dirt and other impurities in order for it to pass into a certain grade, while here the grain goes directly into the grade it then inspects without allowing anything for cleaning. In the case of flaxseed, however, it is different, the inspector determining what amount of impurities there are in the seed according to the rules and regulations governing the inspection of flaxseed.—H. H. CARR, Chicago.

No. 35. Belts Running to High Side of Pulley.—In answer to question in No. 29, will state that a belt does not run to the high side of pulley in a majority of cases. The high side of pulley is meant by me to represent the side of edge farthest away from mate or other pulley. I will state cause for belt running to high side, which is this: The belt is probably stretched tighter on one side than on the other. This may be caused in various ways. The belt may be cut on an angle of 85 degrees instead of 90, and laced or joined so as to make both edges of the ends meet, or it may be caused by belts that, when laid out on the floor, present a curved line instead of a straight one. This belt when joined together presents a hoop-like appearance.—R. R. R.

No. 36. Rosin on Belts.—I see No. 21 wants a substitute for rosin for slipping belts. Here is one I have never known to fail: A little wider pulley and a correspondingly wider belt. There is evidently too much work for his belts to do, or they would not slip. Rosin, while very effective when first put on the belt, soon loses its effect and gums up in bunches on the surface of the belt and face of the pulleys, thereby throwing the strain upon the belt in spots, noticeable in rubber belts by their peeling off, and in leather by their fulling up on the back side, generally having a deleterious effect on all kinds of belts. A good way to obviate this evil is to make what I call an automatic tightener. It is hinged at one end of frame where it has to rest on the floor, and swings back and forth, taking up the slack in the belt caused by the strain of extra burden, and comes back to place as the burden lightens. Where it is used between floors, or for quarter-twist belts, put a rod through the frame somewhere near the center, and suspend it to frame fastened to joist; then attach a weight to end of opposite pulley, and you have it.—WISCONSIN.

MINNEAPOLIS RECEIPTS.

According to the report of Chief Inspector Sheley Minneapolis grain receipts for October were larger than for any preceding month. There were 15,756 cars of grain inspected, against 15,696 cars in October, 1889. The receipts of spring wheat included 156 cars of No. 1 hard, 5,331 cars of No. 1 Northern, 5,483 cars of No. 2 Northern, 1,663 cars of No. 3, 889 cars of rejected and 582 cars of no grade, against 876 cars No. 1 hard, 10,570 cars No. 1 Northern, 1,694 cars No. 2 Northern, 489 cars No. 3, 585 cars rejected and 260 cars no grade for the same month of 1889. In October, 1888, there were received 1,024 cars No. 1 hard, 2,644 cars No. 1 Northern, 3,149 cars No. 2 Northern, 1,183 cars No. 3, 1,240 cars rejected and 1,374 cars of no grade spring wheat.

The Great Northern Road brought 5,733 cars; the Milwaukee, 2,417; the Minneapolis & St. Louis, 1,521; the Northern Pacific, 1,553; the Omaha, 1,632; the Minnesota Transfer, 548; the Soo, 538; the Kansas City, 6 cars. The total amount of wheat received at Minneapolis in October amounted to 14,428 cars, against 14,474 in October 1, 1889, and 10,614 in October, 1888.

COLLECTING FOR SHORTAGES.

Country Grain Shipper—I have called again to inquire about my claim for non-delivery of grain. Have you received any information regarding it?

Freight Representative—Please write your name, point of shipment and destination, number of car, and give kind and quantity of grain car contained on that piece of paper, and I will look it up.

Shipper writes out information for the fifth time and passes it into the clerk, who leisurely scans the paper and asks—What month did you ship this grain, Mr. Heavy Shipper?

Mr. Shipper—In July.

Freight Representative (turning to a pile of dusty books)—What year?

Mr. Shipper swoons and the clerk goes on with his work.

WILL NOT TRADE AT A LOSS.

It is frequently stated that the effect of the advance of 25 to 30 per cent. in silver value will reduce the movement of wheat from Russia and India. We have printed herein a paragraph on that subject, and have no doubt of some ultimate effect in that line, but we cannot forget that the poor producer everywhere is at the mercy of the buyer, and he must take what he can get. Odessa and Bombay dealers, like export dealers in all other seaports, will not continue to pay for wheat a price that will entail a sure loss, and thus the effect extends to the interior. The producer will squirm and wait awhile, but finally he will be pushed to sell. That is our theory on that question. Meantime the importing countries give no evidence of solicitude about future supplies. Of course, if Russian shipments decrease much before the close of navigation, it may stimulate Great Britain to hustle around for supplies.—*Toledo Market Report.*

Trade Notes.

A citizen of North Yakima, Wash., has invented a hay baler, and sold his patent to Portland parties for \$25,000. The balers are being manufactured in Portland, and are a pronounced success.

The Main Belting Company of Philadelphia, Pa., say: Business with us since January has been very good; have been behind with orders until recently. We are now adding new machinery, and will increase our capacity fully one-third. We consider the outlook for the future trade quite promising.

Borden, Selleck & Co., 48-50 Lake street, Chicago, sole manufacturers of the "Harrison" Conveyor for handling coal, grain, tan-bark, ashes, seeds, etc., inform us that business is very good, and that they have numerous inquiries which promise well for closing.

The firm of Thornburgh & Glessner of Chicago, manufacturers of mill and elevator supplies, have removed from their quarters on North Clinton street to Nos. 110, 112 and 114 South Jefferson street. They make this move to obtain more room for their growing business, as the business has outgrown their old quarters. At the new location they have six floors, each 60 feet front, and they will occupy the whole of it.

The North Dakota Railroad Commissioners have prepared rules and regulations for the distribution of cars that have been accepted by the Northern Pacific and the Great Northern Railroads, which if lived up to should give farmers every needed accommodation in the shipment of grain.—*Northwestern Farmer.* And if adopted by South Dakota and Minnesota would be a great improvement over their present regulations.

During October 1,158 cars of winter wheat and 1,198 cars of spring wheat were inspected into store at Chicago, against 1,131 cars of winter and 1,649 of spring wheat in October, 1889. Of the winter wheat 653 cars graded No. 2; 391 No. 3; 85 No. 4, and 29 cars, no grade, against 93 cars No. 2; 747 cars No. 3; 277 cars No. 4, and 84 cars no grade. Of the spring wheat received 455 cars graded No. 2; 640 cars No. 3; 79 cars No. 4, 24 cars no grade, against 2 cars No. 1; 841 No. 2; 552 No. 3; 239 No. 4, and 15, no grade, for October, 1889.



Issued on October 14, 1890.

BALING PRESS.—Albert A. Gehrt, Quincy, Ill., assignor to the Collins Plow Company, same place. (No model.) No. 438,540. Serial No. 323,237. Filed Sept. 7, 1889.

GRAIN METER.—John S. Chase, New Salem, Kan. (No model.) No. 438,370. Serial No. 352,493. Filed May 20, 1890.

WEIGHING SCALES.—William H. Stewart, Kansas City, Kan., assignor to H. N. Strait, same place. (No model.) No. 438,248. Serial No. 337,304. Filed Jan. 18, 1890.

Issued on October 21, 1890.

SPLIT PULLEY.—Wm. S. Magers and Frank P. Parker, Gosben, Ind. (No model.) No. 439,020. Serial No. 356,222. Filed June 21, 1890.

GRAIN CAR DOOR.—Le Baron Reifsnider, Altoona, Pa. (No model.) No. 438,737. Serial No. 346,581. Filed April 4, 1890.

COMBINED SACK-FILLER AND SCOOP.—Walter H. Robinson, Hickson, assignor of one-half to Mattie P. Davies, Fargo, N. D. (No model.) No. 438,948. Serial No. 357,458. Filed July 1, 1890.

COMBINED PLATFORM-SCALE AND CALCULATOR.—Mac Phelps, Red Oak, Iowa. (No model.) No. 438,753. Serial No. 348,303. Filed April 17, 1890.

GRAIN WEIGHER.—John H. Poulter, Arcola, Ill., assignor of one-half to Jos. B. Barricklow, same place. (No model.) No. 439,024. Serial No. 332,507. Filed Dec. 4, 1889.

Issued on October 28, 1890.

BALING PRESS.—Andrew Wickey, Quincy, Ill. (No model.) No. 439,335. Serial No. 292,192. Filed Nov. 30, 1889.

MACHINE BELTING.—George F. Page, Concord, N. H. (No model.) No. 439,282. Serial No. 357,994. Filed July 7, 1890.

DRIVE-CHAIN.—Charles H. Brampton, Birmingham, Eng. (No model.) No. 439,466. Serial No. 357,386. Filed July 1, 1890. Patented in England Dec. 2, 1889, No. 19,321.

GRAIN SCOURER.—Peter Provost, Minneapolis, Minn. (No model.) No. 439,555. Serial No. 354,341. Filed June 5, 1890.

AUTOMATIC GRAIN SCALES.—John H. Forsyth, Fargo, N. D. (No model.) No. 439,135. Serial No. 350,427. Filed May 3, 1890.

APPARATUS FOR HANDLING HAY.—Thomas Potter, Swansea, Mass. (No model.) No. 439,326. Serial No. 354,929. Filed June 10, 1890.

POWER-TRANSMITTING DEVICE.—Samuel K. White, Chicago, Ill. (No model.) No. 439,316. Serial No. 329,632. Filed Nov. 8, 1889.

PROCESS OF DELINTING COTTON SEED.—Robert S. Baxter and George D. Macdougald, Dundee, Scotland. (No model.) No. 439,464. Serial No. 294,764. Filed Dec. 27, 1888. Patented in England June 5, 1888, No. 8,187; in Germany Nov. 29, 1888, No. 49,043; in France Dec. 1, 1888, No. 194,474; in Belgium Dec. 1, 1888, No. 81,848; in Denmark Dec. 24, 1888, No. 1,282; in Canada Feb. 27, 1889, No. 20,859, and in India March 4, 1889, No. 156.

Issued on November 4, 1890.

BELT SHIFTER.—John M. Sailer, Milton, assignor to John and Robert Barlass, Janesville, Wis. (No model.) No. 439,692. Serial No. 341,274. Filed Feb. 21, 1890.

BELT TIGHTENER.—Amaziah Pollock, Hallsville, Ill. (No model.) No. 439,790. Serial No. 358,436. Filed July 11, 1890.

MAGNETIC SEPARATOR FOR GRAIN.—Ewald von Syo, Augsburg, Germany, assignor to Philip Adam Fafel. (No model.) No. 440,070. Serial No. 351,791. Filed May 14, 1890.

BAG HOLDER.—Ira B. Tryon, Hebron, Ill. (No model.) No. 440,073. Serial No. 355,329. Filed June 13, 1890.

Issued on November 11, 1890.

GRAIN METER.—Hale E. Hawk, Bucyrus, Ohio. (No model.) No. 440,354. Serial No. 332,133. Filed Nov. 30, 1889.

AUTOMATIC GRAIN SCALES.—Hale E. Hawk, Bucyrus, Ohio. (No model.) No. 440,355. Serial No. 340,002. Filed Feb. 11, 1890.

GRAIN SCALES.—Phares R. Grabill, Millersburg, Pa. (No model.) No. 440,613. Serial No. 323,579. Filed Sept. 10, 1889.

A prize of \$100 is to be given by the Spokane Falls exposition management for the best and largest yield of flaxseed.

LAW AND LITIGANTS.

Limitation of Agent's Authority.

Where an agent transacts the business of his agency by virtue of a written commission, those who have knowledge of that fact are charged with notice that his authority is of a limited nature, and are bound to know that such contracts as he makes with him are within the scope of his authority.—*Johnson vs. Alabama G. F. & M. Co., Supreme Court of Alabama, 8 South Rep. 101.*

Liability of Carrier under Limitation Risk.

A common carrier which has entered into a valid contract under which it is exempt from liability for loss of goods entrusted to it, by fire, is only bound to use ordinary diligence in protecting the goods from that danger, but although the exemption is absolute in terms, the company will still be liable if a loss result from its failure to exercise ordinary care.—*Little Rock, M. R. & T. Ry. Co. vs. Talbot, Supreme Court of Arkansas, 14 S. W. Rep. 471.*

Seed Wheat Note—First Lien.

In the seed wheat case of Warder, Bushnell & Gleason, respondents, vs. the Minnesota and Dakota Elevator Company, appellant, Judge Collins of the Minnesota State Supreme Court has decided "that the plaintiff was a party furnishing seed wheat to one B, within the meaning of section 21, chapter 39, general statutes 1879; that the note given by B to plaintiff for the value of said wheat was a 'seed grain note,' and the amount thereof a valid first lien on the product of said seed."

Pledge of Goods in Warehouse.

Where for the purpose of pledging goods stored in a warehouse the owner delivers the warehouse receipt to the pledgee, the right to the exclusive and absolute control of the goods if he chooses to exercise that right. But where he does not claim or exercise that right, and the owner has free access to the goods, it is his duty to care for them if they are in danger, and if he fails to do so he cannot recover from pledgee any damages sustained by the goods while in pledge.—*Willets vs. Hatch, Common Pleas of New York City and County, 11 N. Y., Supp. 73.*

Sale of Insured Property.

Where a policy of insurance provides that it shall be void if the property insured be sold or transferred, or any change take place in the title or possession thereof, a contract of sale under which the legal title does not change, has the effect of rendering the policy void if by the terms of the contract the loss resulting from the destruction of the property without insurance would fall upon the purchaser and not upon the one insured. Although the legal title may be in him, his insurable interest has passed, and no one is permitted to hold insurance on property the destruction of which would result in gain to him.—*Cottingham vs. Fireman's Fund Ins. Co., Court of Appeals of Kentucky.*

Factors' and Brokers' Commissions.

Goods were consigned under an agreement that the factor was to receive his commissions on sales within a certain time after receipt of bills for the same. The factor, on his part, agreed to keep all entries as to such sales in separate books, to collect and remit the accounts upon the respective dates of maturity by check, the remittances to be made daily, if collections reached \$1,000, and payments made before maturity to be remitted, less discount, for anticipation of payment. Under such a contract the factor was entitled to commission only upon the amounts actually remitted.—*Hockanum vs. Lincoln, Common Pleas of New York City and County, 11 N. Y. Supp. 79.*

Acceptance of Draft on Receipt of Goods.

The Supreme Court of Wisconsin has decided that where a contract for the sale of goods provides that on receipt of the goods at the depot of the transportation company the purchaser should accept a five-days' draft, the seller must make such a delivery of the goods as will enable the buyer to demand them from the transportation company before he can insist upon that condition. The buyer is not liable where the seller has the bill of lading for the goods issued to himself, and instructs his agent not to deliver it to the buyer until the draft has been paid. In such case there is no transfer of title to the buyer, without which there can be no liability.

Presenting Claim against Telegraph Company.

The provision printed in the heading upon a telegraph blank, that no liability shall attach to the company for any damages, unless the claim therefor is presented in writing within sixty days after the message is sent, is reasonable and valid, and the sender of a message is bound thereby. The agent or manager of the company at the local office is the proper person to make the demand upon, and he is competent to act upon an oral claim, and

may waive a written demand, and if upon oral demand he place his refusal to act upon other grounds than that the demand is not in writing, his action upon the oral demand waives a written one.—*Hill vs. Western Union Tel. Co., Supreme Court of Georgia, 11 S. E. Rep. 874.*

Assessment of Property Stored in Warehouse.

Personal property stored in a warehouse, for which the warehouseman has given his receipt, is, as a matter of law, in the possession of the owner of the receipt, and not in the possession of the warehouseman, and such property does not, as to the warehouseman, come within the provision of a statute which requires that for the purpose of assessment a person shall state under oath all property belonging to, claimed by, or in the possession or under the control and management of such person. And where the owners of a warehouse, at the request of the assessor, give him a memorandum of goods in store in their warehouse, stating that they do not own it, the assessor has no right to arbitrarily add the amount of it to the property returned by them.—*Weyse vs. Crowford, Supreme Court of California, 24 Pac. Rep. 735.*

Bills of Lading.

At Minneapolis recently in the case of the National Bank of Commerce, respondent, vs. The Chicago Burlington & Northern Railway Company, appellant, and the same vs. Wisconsin Central Railway Company, the Supreme Court gave the following opinion:

The plaintiff in these actions asks for a reargument on the ground that counsel and the court overlooked section 17, chapter 124, General Statutes 1878, which provided that the bills of lading or receipts for any goods, wares, merchandise, etc., when in transit by cars or vessels "shall be negotiable and may be transferred by indorsement and delivery of such receipt or bill of lading, and any person to whom said receipt or bill of lading may be transferred shall be deemed and taken to be the owner of the goods and wares or merchandise therein specified," etc.

This statute was not called to our attention upon the argument, but an examination of it upon this motion satisfies us that it has no bearing upon the questions involved in these cases.

It is not intended to totally change the character of bills of lading and put them on the footing of bills of exchange and charge the negotiation of them with the consequences which attend or follow the negotiation of bills or notes. On the contrary, we think the sole object of the statute was to prescribe the mode of transferring or assigning bills of lading, and to provide that such transfer and delivery of these symbols of property should, for certain purposes, be equivalent to an actual transfer and delivery of the property itself. We cannot see that section 772, cited in the petition for reargument, has any bearing whatever on the case, and the petition for reargument is therefore denied.

A farmer near LeRoy, N. Y., has husked 2,500 bushels of corn from twenty acres of land, and not bottom land. He has raised corn on the same field for six consecutive years.

In the Red River Valley wheat threshed out much better than was expected. This, together with the high price of wheat, has enabled many farmers to pay off the mortgage, while the general feeling throughout the valley is better than for some years past.—*Northwest Farmer.*

In 1888 the Pillsburys et al were to have flour at \$10 a barrel, and nothing for export. We managed to squeeze out, in flour and wheat, and export 88,000,000 bushels. The price advanced way above one dollar, but in the following June the price here had declined to 83 cents. We have wheat for export, but we hope we can get a good price for it.—*Toledo Market Report.*

A Sioux Falls (Dak.) paper says: "At least 50,000 acres of land in Beadle county alone will be irrigated the coming season. Brown county will soon vote on a proposition to put down 200 wells, and there is every prospect of a successful issue. Other counties are doing likewise. Next summer will see nearly 1,000 square miles of land under bountiful crops, the result of irrigation."

The grain crops of Eastern Washington and Northern Idaho are so enormous that there are not half as many cars on the Union and Northern Pacific railroads as are needed to move them for months to come. There are 13,000,000 bushels to be shipped from Washington, and yet thousands of cars are demanded for other shipments. Many capitalists are building large elevators in consequence.

The chairman of the Western Classification Committee has prepared a statement showing that the proposed uniform classification would reduce rates on less than carload lots between Chicago and Kansas City from 1.84 cents to 1.83 cents, and increase rates on carload lots from 1.09 cents to 1.22 cents. Shippers should be consulted in this matter of classification before the changes are made.

The American wheat production shows greater loss in bushels than any other country, if the comparison is made with the 1889 harvest. It will be remembered, however, that the crop of last year yielded above the average in this country; and if no allowance be made for the increase in population, and consequent consumption, that crop was quite as far above an average as this is below it.—*Minneapolis Record.*

PRESS COMMENT.

QUALITY, NOT NAME, RULES PRICES.

Between the grain raisers and the mills there is a wide road, in traversing which grain undergoes a marked change of grade. It is a matter of notoriety that millions of bushels of Nebraska corn sold as No. 3 is transformed into No. 2 on reaching Chicago, and No. 2 in Nebraska is metamorphosed into No. 1 in New York. By some sort of jugglery or deception the farmers are deprived of the difference in prices, and the elevators or speculators enriched.—*Omaha Bee.*

COMPARATIVE WHEAT ADVANCES.

In Europe the rise in wheat is not more than half as much per cent. on the average as in this country. The probable cause of that is that the shortage in yield below last year is here instead of there, and the shortage is felt most in the country where it exists. Besides that, there is more tendency here to make the most of a shortage than anywhere else on earth, owing to the activity of speculation in American breadstuffs.—*Minneapolis Market Record.*

LOW OCEAN FREIGHTS.

The extremely low rates at which steamers are bringing grain from New York and Odessa, and even from India, have a good deal to do with the existing depression of the foreign wheat market. The matter, unfortunately, is one which lies largely beyond the control of persons interested in the grain trade, for the vessels which bring grain from distant foreign ports at nominal charges are enabled to do so principally by reason of the demand for English goods abroad, the inquiry for which depends often upon the most recent causes quite outside the range of agricultural interests.—*Mark Lane Express.*

WHEAT PRODUCTION.

It is not well to form hasty conclusions concerning the American wheat crop. While the great surplus of corn is raised in a few states, the production of wheat is widespread, and spreading. Washington and Oregon have probably the largest crops ever grown in these states. The only question of any doubt about it is the means of getting it to market. The price is low—47 cents to 50 cents per bushel—because cars cannot be had to send it to the Eastern lake markets. If transportation can be had, receipts from that source will be increased.—*Toledo Market Report.*

THE EXCHANGES.

Tickets of membership to the New York Produce Exchange have advanced to \$800 and \$825.

The Buffalo Merchants' Exchange is making vigorous efforts to secure Chicago Board of Trade reports.

A committee has been appointed by the Chicago Board of Trade to revise the rules governing the trading in provisions.

Pittsburg merchants want a Board of Trade, as their Chamber of Commerce has not manifested sufficient activity in advancing Pittsburg's interests.

The Conference Committee of the Baltimore Corn and Flour Exchange has succeeded in obtaining better facilities from the railroads. Let the good work go on.

The affairs of the Minneapolis Chamber of Commerce are in a prosperous condition, according to the report of President Greenleaf at its annual meeting, Oct. 21. During the last year the membership was extended and the sinking fund increased. The volume of business has also been augmented.

The National Board of Trade, at its annual meeting in New Orleans, in December, will consider the recommendations of the Committee on Extension and Representation. The committee's recommendations relate to changes in the constitution for the purpose of strengthening and enlarging its work.

The Boston Chamber of Commerce held its annual meeting Oct. 10, and elected the following officers: President, Hon. Alden Speare; vice-president, Lamont G. Burnham; treasurer, Fred N. Cheney. The following were elected directors for three years: George A. Allison, Charles A. Wade, S. Henry Skelton and George E. Mitchell.

The Nebraska Farmer says: "The farmers of Nebraska and Kansas are rushing off their hogs with a rapidity which is alarming. Corn is getting too high to make cheap pork."

THE AMERICAN ELEVATOR AND GRAIN TRADE

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HARLEY B. MITCHELL, - - - Editor.

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., NOVEMBER 15, 1890.

FUTURE FOOD SUPPLY.

C. Wood Davis of Sedgwick county, Kan., in recent articles to prominent journals, especially the *Country Gentleman*, tries to prove that the United States will have to commence importing wheat in 1893 for then "home population will have overtaken production." It makes us very sad to think that our country, which in the face of short crops is now supplying European consumers with a good portion of their breadstuffs, will in the short period of three years commence to depend upon foreign producers for its own breadstuffs.

This is truly startling. Our readers will naturally wonder if the raw material or manufactured breadstuffs will be imported. If statistics, the unlimited amount of fertile fields yet uncultivated and the ability of the American farmer to increase cultivation intensively as well as extensively are to be taken into consideration, we must say that the imports of neither raw nor manufactured breadstuffs will ever amount to much.

Mr. Wood says that the wheat acreage will increase at the expense of the corn and oats acreage during the next two or three years, but after that it will "shrink, as increase the needs of the added people for other farm products." He claims, "We have, in the occupation of the land reached that stage when in order to increase one crop largely we must reduce the acreage in some one or more crops." Despite the fact that we were using corn for fuel last winter, and exported over 150,000,000 bushels in the shape of raw products, cornmeal and meats, Mr. Davis thinks we must soon increase the production of corn and oats to supply the home demand, and this will decrease the production of wheat.

In 1872-'73, with a population of about 40,000,000 and a crop of 249,997,100 bushels of wheat, we exported 52,545,731 bushels. In 1882-'83, with a population of about 52,000,000 and a crop of 504,185,470 bushels of wheat, we exported 148,785,696 bushels. This year, with a population of 63,000,000 and a crop of only 400,000,000 bushels of wheat, we exported during the first three months of the crop year nearly

24,000,000 bushels of wheat, yet in three years' time we must commence to import wheat. Our farmers will all be dead and their farms turned to stone before we will depend upon the poor, ignorant, shiftless farmer of foreign lands, with his primeval machinery and antiquated methods. The nineteenth century will have been long passed before the fertile fields of America refuse to supply sufficient food products for the American people.

RUSSIAN COMPETITION.

Much has been written of late about Russian competition for the wheat markets of Europe, and many writers are greatly worried lest the wheat producers of the United States will soon be without a market for their surplus. There is no objection to looking about for new markets, and the securing of South American markets for our breadstuffs to the exclusion of the producers of other countries would be a shrewd move, for then our farmers would undoubtedly receive better prices for their products than they have been getting of late years in the European markets.

The bulk of the surplus American wheat and flour is marketed in England, and competition in that country is greater than in any country to which we send breadstuffs. It is a market in which the representatives of all countries having a surplus stock of wheat look for buyers—seldom in vain. Competition is so strong there that the English wheat growers are rapidly being driven out of the business. The yearly average price which the English wheat grower received for his wheat during the '70's ranged from \$1.78¾ per Imperial bushel of 61.89 pounds in 1873 down to \$1.33¾ in 1879. Since 1879 the highest yearly average price received was \$1.37¾ in 1881. In 1884 it was \$1.08½; since then the yearly average has been below \$1.

With the exception of one year, American wheat has been the most potent factor in reducing prices in the English markets. If our farmers can drive English farmers out of their home markets, despite the fact that wheat exported is subjected to heavy charges at all grain centers, and outrageous charges at Buffalo and New York Harbor, and despite the fact that it has had to compete with wheat from India and Russia, two countries with an appreciated silver standard, that have until lately given their exporters a great advantage over the exporters of like products from other countries, it hardly seems possible that Russia, with her poor soil, can take the market away from us.

If the intelligent English farmer, with his improved machinery and advanced methods cannot compete, in a market not a hundred miles away, with the American farmer, who is several thousand miles from that market, how is the heavily-taxed, ignorant Russian farmer, a thousand miles away, with his antique machinery (if he has any), ancient methods and wretched shipping facilities, to do it. America is constantly making more advancement in the production, harvesting and handling of grain than all other countries put together. Her millers are more progressive than those of any other country, and are continually devising new machines and methods for the cheaper and more economical manufacture of flour. In both these lines America leads, Russia follows at a distance.

For a number of years India was pointed out as a successful competitor with America for the English wheat trade, but the producers themselves have taken to eating wheat, and India's exports are decreasing instead of increasing. A great portion of the wheat it does export goes to ports on the Mediterranean Sea, where it does not have to compete with American wheat.

The faster machinery and improved methods of growing and handling wheat are adopted in Russia, the more prosperous will the farmer become, and as his variety of food products is very limited, he, like the wheat producer of India, will take to consuming more wheat and less black bread.

The production of wheat is constantly decreasing in England, and the number of wheat consumers in England, as well as Europe, is rapidly

increasing. The amount of wheat produced in Europe has not varied much during the last seven years, the amount produced this year being less than a million bushels in excess of the crop of 1884. Russia's crop this year was only 225,000,000 bushels, being 41,000,000 bushels less than in 1884, and only 37,000,000 bushels in excess of last year's crop.

It cannot be denied that Russia is advancing, for she is adopting our farming machinery, our grain elevator system and grain cleaning and handling machinery, and her flour millers have determined to make an organized effort to secure a portion of the trade of flour importing countries. In adopting the methods of others they are very awkward and unpractical, and like the Mexican who wished to carry the wheelbarrow on his head, they want to do everything the wrong way. An elevator of nearly 1,000,000 bushels' capacity is now being erected at a port in Southern Russia; not at the water's edge, but four miles from it.

We naturally expect our exports of wheat and its products to decrease unless our production increases. In 1880-'81, with a population of 50,000,000 and a wheat crop of nearly 500,000,000 bushels, we exported 187,000,000 bushels in the shape of wheat and flour. This year, with 13,000,000 more people to feed at home, we have nearly 100,000,000 bushels less wheat. When the American farmer can find a market at home for all the wheat he produces, at better prices than he can get in Europe, he is not going to pay an immense freight bill just for the privilege of sending his wheat to Europe to compete with Russian wheat.

When we have a surplus we will sell it abroad without trouble. Buyers do not discriminate, save that they prefer the clean American wheat. America and Russia may have a large surplus of wheat two or three years in succession, and at the same time, but the acreage planted the following years will be smaller, and the reduction in Russia will be much greater than in America. Russia may compete with us—any country can do that—but she cannot drive us out of the European markets.

HOW FARMERS GET SEED WHEAT

Once every two or three years the farmers of the Dakotas and parts of Minnesota have called upon the elevator men of the Northwest for seed wheat, and the elevator men innocently accepted their promises to pay in exchange for the necessary wheat, until experience taught them that the word of the farmer was no good, and that his written promise to pay was worse.

The elevator men of the Northwest, heretofore, have been unable to collect more than 10 per cent. of the amount due them from the farmers for seed wheat, and last spring when the farmers of the Northwest wanted seed wheat, the elevator men naturally refused to let them have it unless responsible parties would guarantee payment. In some cases this was done by citizens of the towns where the farmers traded, but in North Dakota the governor and several state officials organized a seed wheat commission for the purpose of securing seed wheat for the farmers and protecting the elevator men against loss.

A mortgage was drawn up providing that it should be a first lien upon all wheat produced from the seed, thus giving the elevator men precedence over creditors who had older accounts. The elevator men finally accepted these non-interest bearing mortgages in payment for seed wheat. If the recent report sent out from Jamestown, N. Dak., be true, the mortgages are not good and the elevator men will probably not be able to collect any more than they have heretofore. This report is published elsewhere in this issue, and it shows vividly the determination of the farmers to beat the elevator men whenever they have an opportunity.

When the elevator men refused to give them seed wheat unless amply secured, the cry of "sharper! robber! wolf! thief!" went up from many throats, and especially the malignant, unprincipled agitators of the Northwest. All sorts of malicious charges were made against the grain dealers, and now that they desire to collect for

the seed given, the pernicious agitators have sent out new charges, which are also false.

It would be directly against the interest of any grain dealer to give the farmers whose grain he buys any other than the best wheat in his possession for seed. Every dealer knows that poor seed will give a poor product, and none desire to buy poor wheat. If the agitators and demagogues tell the truth in regard to the farmers trying to shirk their responsibility in this matter, they are surely as devoid of honor as the demagogues themselves. We doubt not that when the elevator men supply the farmers with seed wheat again it will be for cash.

DISTRIBUTION OF CARS.

The Railroad and Warehouse Commissioners of North Dakota have adopted rules for the distribution of cars between stations and to shippers, which provide that cars shall be distributed to stations for grain shipments according to the average daily shipments from such stations. In distributing cars to grain shippers, station agents must give one car to each shipper ordering cars, and distribute the balance according to the amount of grain in sight offered for shipment by each shipper. Twenty-four hours is given for loading and unloading grain, and the railroad companies are given permission to charge \$3 for every day or part of day cars are delayed over this time. The rules for the distribution of cars are impartial, and do not favor farmers and other track shippers as much as was expected. The rule regarding demurrage would prove very severe upon shippers if the railroad companies should charge as much as allowed by the rule.

If the railroad commissioners and boards of transportation of the other states would adopt rules as just as these they would confer a great favor upon shippers. In a couple of states in the Northwest the rules governing the distribution of cars are very unfair to the country elevator proprietor. Although his elevator may be filled he cannot get any more cars than the track shipper, who has no grain in sight. This, of course, works a great injustice upon the elevator proprietors.

Nebraska is also sadly in need of laws or rules governing this matter, for frequently track shippers at points near to towns where the elevators were filled have secured many cars, while the elevator men could get none. This enables the track shipper to buy grain, while the elevator man must suspend operation. In Kansas matters are not much better.

ADVANCE IN FREIGHT RATES.

Lake navigation is about at an end for this season, and the trunk line railroad companies are relieved of a strong competitor for a time, so they have decided to advance freight rates Nov. 24 on grain and meats from Chicago to the seaboard. The rate on wheat and oats will be advanced to 25 cents per hundred, and corn to 22½ cents. The railroad officials try to excuse the advance by claiming that the operating expenses are so much heavier during the winter that it is necessary. They forget that the extra amount of traffic more than offsets the increase in expenses.

Chicago shippers are vigorously protesting against the advance, and the directors of the Board of Trade have adopted a resolution strongly opposing it. The discrimination against oats and in favor of corn is also meeting with much opposition. If the National Transportation Association will only fight this advance as fiercely as its members did the uniform bill of lading, the present rates which the Inter-State Commerce Commission decided some time ago were reasonable, will be retained.

The chairman of the Chicago Committee of the Traffic Association has issued a circular to shippers notifying them that all freight contracted for shipment Eastward previous to Nov. 24, when the advanced rates go into effect, will be forwarded at the rates prevailing at time directions were given. Way bills must bear this notation, however: "In transit prior to Nov. 24." All property bought on the Board of Trade and or-

dered over to Eastern lines before Nov. 24, and for which the orders are accepted by the Eastern lines, will go forward at rates in effect previous to that date, provided car numbers and final shipping directions are furnished by shippers to the chairman of the Chicago Committee prior to Nov. 24, way bills to bear notation, "In transit before Nov. 24."

Rates between Chicago and Minneapolis, St. Paul and other Minnesota points will also be advanced Nov. 17. Rates on first and second class will be advanced 10 cents, third class 8 cents, fourth 3 cents, and fifth 2 cents. A commodity list has also been agreed upon. This advance will probably be followed by an advance between Chicago and Sioux City and other points in the Northwest, so shippers who can will do well to take advantage of the present rates.

GRAIN IN BOND.

The Secretary of the Treasury recently gave a hearing to the representatives of certain proprietors of elevators in the United States in which they appealed to have the system of stationing United States customs officials upon the Dominion soil changed so that all cars transporting merchandise for delivery in the United States under the immediate transportation system shall be sealed upon American soil, and not in Canada. Much grain shipped from United States lake ports by vessel for transportation in bond through Canada to another point in this country is unloaded from vessels into elevators on the Canadian side, and there shipped in bonded cars through Canada to Eastern cities.

At present United States customs officers are stationed at different points on Georgian Bay and at Windsor and Sarnia for the purpose of manifesting, bonding and sealing this traffic. These officials are stationed at these points at the request of the Canadian Pacific and Grand Trunk officials. The elevator and business interests claim that the freight facilities for shipping being the same, the customs officers should be withdrawn from the Canadian ports, and the grain and merchandise to be reshipped over foreign railroads should be transferred on the American frontier under the direction of the customs officers.

The withdrawing of the customs officials from these points would prevent any more grain being shipped in bond by way of these ports, and the Canadian roads would be unable to carry the grain by an all-rail route as cheaply as they now do by a lake and rail route. This would give the American roads and canals more grain to carry and the Buffalo elevator pool more grain to levy upon. Shippers, however, would have to pay more for transportation and the power of the Grand Trunk, which has frequently wielded a mighty influence in securing justice for shippers, will be reduced.

DEMURRAGE AT LOUISVILLE.

A hotly contested battle is being waged at Louisville, Ky., over the demurrage question. The car service bureau of the railroad companies is striving fiercely to enforce its rules on this question. The receivers and shippers of that city considered the rules so unreasonable that they organized the Merchants' and Manufacturers' Defensive Association, and members have pledged large sums of money to be used in opposing the impositions.

The bureau manager has threatened to refuse to deliver cars on private sidings if the rules are not obeyed, but this would be worse on the railroads than on the receivers and shippers, for a blockade would ensue. It would also be an easy matter to enjoin the railroads from taking such action. The Car Service Bureau has gone so far as to refuse to deliver cars to a receiver who had repeatedly refused to pay demurrage charges, but an injunction was immediately applied for. The receivers and shippers only ask that they be allowed four days for loading and unloading, which is not too long a time. At some points six days are allowed.

The manager of the Car Service Bureau has re-

cently laid down a principle that has caused considerable talk among receivers. A grain dealer named Underhill purchased a car of grain at some country point, and it was sent subject to shipper's orders, and the bill of lading, with draft attached, came through a local bank. Mr. Underhill took up the draft, and surrendered the bill of lading to the railroad, and was then recognized as the owner of the carload of grain. He then sold the grain, and gave the purchaser an order for the car. There was several days' delay in unloading, and the Car Service Bureau rendered a bill for the detention of the car. Mr. Underhill referred the collector to the party who had taken the car, and the latter very promptly paid the bill. But when the return was made to the manager, he refused to have it so, and returned the money and sent the bill to Mr. Underhill. He informed Mr. Underhill that he could not recognize the right of any one to turn over this responsibility for the detention of cars to others, and would insist upon his paying the bill. The principle involved is an important one, as under such a rule any bank taking up a bill of lading for a customer would become liable for all demurrage charges which might accrue afterward.

Slowly but surely the railroad companies are learning that they cannot have their own way in everything.

THAT WAREHOUSE SCHEME.

Reports from Washington indicate that the Farmers' Alliance is jubilant over its victories in the South and West, and will proceed to demand that Congress shall pass their absurd warehouse scheme, by which the Government is expected to become banker for the people who raise grain, cotton, tobacco, etc.; in fact, they want the Government to go into the pawnshop business.

Let them possess their enthusiastic souls in peace. The Government will do no such thing. There was danger that the two old parties would be so evenly divided that the Farmers' Alliance would hold the balance of power, and could demand and get unreasonable legislation as the price of any legislation at all. But the Democrats have so large a majority that they need no votes outside their party for a quorum or for business. The traditions of the party are all against such schemes. All well-wishers of the Government rejoice that both the old parties are relieved of any fancied necessity for conceding reckless legislation to the Farmers' Alliance. The warehouse scheme is an "iridescent dream."

THE Barnard & Leas Manufacturing Company of Moline, Ill., have already issued their catalogue for 1891. It is the first in the field, and makes a handsome book of nearly 200 pages. It is well arranged, of convenient size, and fully illustrated. They will send copies to parties who request it.

Those who expect to purchase new machines for feed grinding, or who contemplate changes or additions to their present plant, will doubtless observe the new advertisement in this issue of Bowsher's Combination Feed Grinding Mill, made by N. P. Bowsher of South Bend, Ind. Its record extends over four years, during which the mill has demonstrated its value to users in all parts of the Middle, Southern and Western states. Mr. Bowsher will be pleased to send descriptive circulars, etc., to interested parties.

WE publish elsewhere in this issue a very complimentary letter from the Briansk Iron and Machine Company to C. Reuther & Reisert of 74 Cortlandt street, New York, in regard to the "Chronos" Automatic Grain Scale. The Briansk Company is the largest concern of the kind in Russia, and employs about 6,000 men. Messrs. Reuther & Reisert write us that during the past week they have sold three scales to the "Gallego Mills," Richmond, Va., and several others to less prominent mills. B. F. Ortman of Urban & Co., Buffalo, N. Y., who have had a "Chronos" in operation for four months on uncleaned wheat, has sent a very flattering testimonial letter to Reuther & Reisert.

Grain Dealers' Associations.

KANSAS AND NEBRASKA GRAIN DEALERS' ELEVATOR ASSOCIATION.

President, MASON GREGG, Lincoln, Neb.; *Vice-President*, FRANK LOWER, Council Grove, Kan.; *Secretary*, W. T. CAYWOOD, Clifton, Kan.; *Treasurer*, O. A. COOPER, Humboldt, Neb.

GRAIN SHIPPERS' ASSOCIATION OF NORTH-WEST IOWA.

President, T. M. C. LOGAN, River Sioux; *Vice-President*, H. HANSON, Odebolt; *Secretary and Treasurer*, F. D. BABCOCK, Ida Grove; *Assistant Secretary*, F. G. BUTLER, Schaller.
Executive Committee, E. A. ABBOTT, Des Moines; J. Y. CAMPFIELD, Sac City, and T. M. CATHCART, Kingsley.

GRAIN DEALERS' ASSOCIATION OF OHIO.

President, J. W. McCORD, Columbus, Ohio; *Vice-President*, L. BOGGS, Kingston; *Secretary*, E. C. WAGNER, Columbus; *Treasurer*, D. McALLISTER, Columbus.
Board of Managers, C. D. MILLER, Newark; DILL WEIGAND, South Bloomfield; E. M. BENNETT, JR., Urbana; C. W. PRINGLE, Lilly Chapel, and H. CHAMBERS, Worthington.

Legislative Committee, J. W. McCORD, D. McALLISTER, E. C. WAGNER, W. A. HARDESTY, and E. C. BEACHALL.

ILLINOIS GRAIN MERCHANTS' INSURANCE AND PROTECTIVE SOCIETY.

President ISAAC VAN ORDSTRAND, Hawarden; *Secretary and General Manager*, S. K. MARSTON, Okauchie; *Vice-President*, JOHN STEWART; *Treasurer*, G. C. McFADDEN, Havana.

Executive Committee, S. K. MARSTON, D. H. CURRY and F. M. PRATT.

Committee on Claims, D. M. BRUNER, J. F. ZAHN, H. C. MOWREY.

Committee on Legislation, W. ARMINGTON, V. R. ST. JOHN, C. C. ALDRICH.

Editorial Mention.

WE will not be responsible for any loss suffered by grain dealers who do not subscribe for the AMERICAN ELEVATOR AND GRAIN TRADE.

WE are indebted to Secretary T. C. Friedlander for a copy of the twenty-third annual report of the San Francisco Produce Exchange.

THE rate of winter storage on grain in Toledo, exclusive of elevation, will not exceed $2\frac{1}{2}$ cents per bushel from Dec. 1 to and including April 15.

THE Receivers' and Shippers' Association of Chicago has held a meeting recently and undoubtedly will strongly oppose any injustice which the railroad companies seek to inflict through the medium of the Demurrage Bureau, which they recently revived.

It has been suggested that carbonic acid gas be used in automatic sprinklers instead of water in places where much damage can be done by water. This substitution can no doubt be done successfully, and would prove advantageous in flour mills and grain elevators.

WACO, Tex., is to have a pecan elevator, and a stock company has been organized to erect it. This is surely a great departure from old methods. The elevators and conveyors usually employed by man in handling and disposing of pecans, he brings into the world with him.

NO ONE can deny that a grain dealer, elevator man or any other person who advances the interests of the trade by giving those connected with the trade the benefit of his experience and knowledge is a public benefactor, a philanthropist of the first water. We will gladly publish, free of

charge, anything of interest to the trade. Our "Communicated" department is for the use of all.

MUCH mortgaged grain is sold every year, and buyers frequently have to suffer. This should not be, and it behooves grain dealers in states where the law allows innocent purchasers to suffer therefor to organize and demand a law for their protection. No legislature could refuse such a just demand.

IF reports are true, grain rates in Washington are outrageously high and should be reduced. From Ritzville to Tacoma, a distance of 333 miles, $32\frac{1}{2}$ cents is charged. The railroad companies should not be too exacting of the public, lest when the state undertakes to control them it should go to the other extreme.

THE Illinois Railroad and Warehouse Commission has reduced the charge for the re-inspection of grain to 25 cents a car. This is a sufficient charge, and it would be to the interests of other grain markets if the powers that be would make a similar reduction. New York and New Orleans can well afford to make a large reduction.

IN this issue we publish an article on "Option Trading" by W. C. Brown of the Isaac Harter Milling Company of Fostoria, Ohio, in which the position of all progressive millers is ably depicted. A number of farmers will occupy seats in the next Congress, and a strong effort will be made to enact volumes of just such foolish and destructive laws as the proposed anti-option law.

THE rapid increase in the deliveries of wheat by the farmers and the tightness of the money market has been very influential in depressing prices lately. It is reported that Minneapolis elevator proprietors have notified country buyers that it might be necessary for them to issue scrip for wheat purchases. If they do this it will cause a further decline in wheat, and other grains will suffer also.

THE New York Produce Exchange has adopted two new grades for hard winter wheat as follows: Grade No. 2 hard winter wheat to consist of the hard varieties, to be sound, dry and reasonably clean, and not weigh less than sixty pounds to the bushel, Winchester standard; grade No. 3 hard winter wheat, to be sound and reasonably clean, but to weigh not less than fifty-seven pounds to the bushel.

REPORTS from Odessa state that a special commission has been appointed to establish standard grades for the wheats grown in Southern Russia, and that as soon as this work is completed and the grades accepted, the elevator at that port will work regularly. Russia is advancing in grain handling methods by adopting those in use in this country. However, it will be many years before it will have as efficient a system as the United States.

THE Iowa Railroad Commission is still striving to force the railroad companies doing business in that state to enforce the joint rate schedule ordered, and the railroad companies are seeking to have the law pronounced unconstitutional. At best it will be some time before the fight will be settled, for both parties will continue until the court decides upon the constitutionality of the law, and this decision will not be rendered until the next term of court. It will be a difficult matter to enforce the rates on some roads and not on all.

CHARLES J. MURPHY has been appointed special agent of the Agricultural Department to present to Europeans the availability of corn and corn products for human food. This should have been done long ago. Few persons of Europe know of the many excellent dishes that can be prepared from corn products, and many have such a strong prejudice against it that they will not try it. The Department and the people have long been too

penurious in this matter, and Col. Murphy has not received the encouragement which his sincere efforts to increase our corn exports merit.

NOR half the attention is given to the selection of wheat and other small grains for seed that it deserves. In the United Kingdom a strong organized effort is being made to encourage the planting of better seed. The farmers of this country, as well as Great Britain, pay too much attention to yield and too little to quality. It is a notorious fact that some of the wheats grown by our farmers are so destitute of good milling qualities that many millers will not buy them at any price. A few varieties of poor wheat are apparently very good, but in reality they are simply abominable.

A PEASANT insurrection has broken out in Southern Russia, which is due directly to the decline of the grain trade and the consequent distress among the agricultural class. It is said that competition with India and the United States has practically ruined the trade of the great corn markets of Ibrail and Galatz, the two principal ports on the Black Sea. The decline of Russian grain exports this year has been so great as to attract the serious attention of the government. But of course the "declining export" cranks will continue to inform the public that our foreign trade has been destroyed by Russian competition.

PENNSYLVANIA millers have decided that hereafter they would endeavor to buy grain only of "dealers who will guarantee weights in full on estimated or country pound weight." Heretofore Pennsylvania millers have accepted all shipments as full weight that were not short more than 1 per cent. Some shippers were aware of this, and took advantage of this weakness in the business policy of the millers, and of course could afford to sell a little cheaper than their competitors. It was an unnecessary and unreasonable allowance, a premium for dishonesty, and it is well that it has been abolished.

A NUMBER of avaricious Western farmers have been trying to deprive their home merchants of a little business by shipping their produce to a couple Baltimoreans, who solicited their business by circular, and the result is that J. R. Crittenden and Wm. Stoffen have been arrested for obtaining goods under false pretenses. It is charged that they received and sold the goods, but did not make returns to the farmers. Experience should teach the farmers to patronize home merchants, whom they know to be honest, just and responsible. If they will not do this they deserve to be robbed, as they frequently are.

THE Spanish Government, which last spring placed an almost prohibitive tariff upon breadstuffs imported from the United States by its possessions in the West Indies, and allowed the same articles to be imported from Spain at about one-fifth the duty, has now requested the United States Government to admit the products of the Spanish possessions in the West Indies, especially tobacco and sugar, without the recently imposed tariff restrictions. Spain does not stop with this cheeky request, but goes farther and proposes to exclude American products, especially breadstuffs, in case we refuse to grant the request.

R. JAMES ABERNATHEY, in reviewing in this issue the wheat situation, goes a long distance out of his way to abuse the wheat speculators; in fact, he goes so far, and is so bitter, that one cannot help but think that he has suffered at the hands of the "unmerciful" bears or bulls. Now, the fact is that no class of merchants on earth are more merciful, element and compassionate in dealing with those who have failed or are on the down grade than these very bulls and bears. As one instance we cite the offer of Mr. Hutchinson, who telegraphed Moses Fraley, when that gentleman suspended, that he could have several million bushels of grain he had bought on the St. Louis market, if it would help him any. A more phil-

anthropical, a more charitable set of men cannot be found than that which graces the halls of our commercial exchanges.

THE Supreme Court of Iowa has affirmed the decision of the lower court in the case of shippers against the Rock Island Railway Company for overcharges to the amount of \$2,733.98. The railroad company discriminated against these shippers by giving their competitors a rebate of \$3 a car. The railroad company having accepted for some time a rate \$3 less than the schedule rate, showed that it considered the rate a reasonable one, so now it must refund all it charged the other shippers in excess of this fair and reasonable rate. This is as it should be. No business man should be placed at a disadvantage.

EVERY year a number of rattle-brained, long-haired pessimists glance at the reports of the United Kingdom's imports of wheat from the United States and Russia, and then write a two or three-column article bewailing the decadence of our export wheat trade. They overlook the fact that our flour export trade has greatly increased during the last few years, that our home consumption has increased while production has not. Wheat is a necessity which the United Kingdom and some other countries must import, and as long as the United States has better wheat to sell than any other country they will buy all we can spare, regardless of tariff laws or anything else, save the extinction of their wheat consumers.

IN accordance with the Inter-State Commerce Commission's ruling, the Missouri Pacific reduced rates Nov. 6. The rates from Kansas City to Memphis are going to prove a source of trouble for lines in the Texas grain business. The reductions make the rates on corn, oats and bran from Kansas City to Memphis 16 cents, and on wheat and flour 20 cents. No reduction is made on wheat. On flour the rate is reduced 2 cents, on corn 2 cents, and on bran and oats 4 cents. The rate on wheat and bran to Texas is 40 cents; flour, 45 cents; corn and oats, 35 cents. The difference will result in the diversion of a large proportion of the Texas business to the Southeast, especially when originating in the vicinity of Missouri Pacific territory.

It seems that New York was unable to make enough out of the grain trade so the charges for inspection have been advanced. The grain committee of the Produce Exchange tries to excuse the advance on the grounds that the cars are larger than several years ago, so 50 cents is now charged instead of 30 cents. A thousand bushels at that port is probably larger than it was formerly, for the inspection charge has been advanced from 50 to 60 cents. There are more opportunities to levy against grain going abroad by way of New York harbor than at any other Atlantic port, and the charges for the same service at other ports are less than at that city. What shippers save by water transportation is taken from them by the handlers at Buffalo and New York.

BRADSTREET's reports of stocks of grain east of the Rocky Mountains in the United States and Canada shows that on Nov. 1 the grain in store included 37,938,759 bushels of wheat, 10,014,087 of corn, 6,863,307 of oats, 6,005,405 of barley, and 1,223,443 bushels of rye, against 46,947,796 bushels of wheat, 11,032,365 of corn, 12,561,963 of oats, 2,768,372 of barley, and 1,563,910 of rye on Nov. 1, 1889. The increase in the stocks of wheat during October was 11,138,000 bushels, against over 20,000,000 bushels in October, 1889. During September and October the increase was 15,248,000 bushels, against 26,087,000 in 1889, and 20,480,000 bushels in 1888. The stocks were 9,000,000 bushels less than on Nov. 1, 1889, and 7,000,000 less than Nov. 1, 1888. The stocks of corn decreased 2,300,000 bushels during October, and on Nov. 1 were 1,000,000 bushels less than on Nov. 1, 1889, and 3,160,000 bushels less than on Nov. 1, 1888. The stocks of oats were 5,700,000 bushels less than on Nov. 1, 1889, and 3,500,000

less than on Nov. 1, 1888. The stocks of barley were nearly 4,000,000 bushels more than on Nov. 1, 1889 and 1888. The increase during September and October was nearly 5,500,000 bushels.

COMPLAINTS of scarcity of cars come from many grain-growing districts, notably Eastern Washington, the Northwest and Iowa. Northwestern Iowa seems to be suffering more from the scarcity of cars than any other district, and at many points there is said to be a blockade. All houses are full, no cars can be obtained and no grain can be received. This is a serious state of affairs. The Iowa Railroad Commission has ordered that more cars be given shippers, but in vain. Rates are lower in Iowa than outside, and cars have been drawn from the Iowa division to supply the demand outside the state. If railroad companies were charged for delaying the shipment of grain, as grain shippers are now charged for delaying cars while loading or unloading, they would provide cars when needed.

DOTS AND DASHES.

Farmers in Northern Ohio have sowed a larger acreage than usual to wheat.

The peanut crop having fallen short, prices are higher now than for several years.

If you have spoiled grain do not throw it away. Some brewers use all they can get.

E. M. Howard, East Peru, Me., harvested 1,690 kernels of Japanese buckwheat from one stalk.

St. Paul may have a grain palace. The ice crop is too unreliable to depend upon for an annual palace.

Barley dropped 10 to 15 cents per bushel in Ontario markets after the United States tariff went into force.

Trans-Atlantic grain rates have advanced from nothing to 2 cents on wheat from Baltimore, and 3 cents from New York.

The heavy rains and freezing weather in Kansas have greatly diminished the danger to early fall wheat from the attacks of the Hessian fly.

Exports of wheat and flour from San Francisco from July 1 to Oct. 28, aggregated 4,433,671 centals, against 4,937,194 centals for the corresponding period last year.

Anastasius Vreones, agent for corn merchants at Bristol, Eng., was in the courts recently charged with altering the character of 100 sacks of sealed samples of grain.

O. V. Showerman of Sebawa, Ore., gathered 1,150 bushels of sound corn and 250 bushels, 90 per cent. sound, from 15 acres of land, one acre of which had been drowned out in the spring.

The farmers in the Northwest are holding back their wheat for higher prices. The wheat movement up to Nov. 1, at the eight principal markets, is 5,500,000 bushels less than it was last year.

Prime, the crop expert, says, "practically no oats are moving in the interior, and I think from now on until another crop is made, the receipts will be lighter than we have seen for many seasons."

The Great Northern Road has rescinded its circular, refusing to deliver wheat to tracks over which it may not take its rolling stock, in favor of the Sawyer elevator system at West Superior, Wis.

It is reported that a bank will be established in Chicago by Iowa capitalists, which will make a specialty of handling Iowa funds and looking after packing, live stock and grain interests originating in Iowa.

The clover seed harvest in Kansas, Nebraska, Iowa, Missouri, Illinois, Wisconsin and Michigan is below the average. In Michigan, which produces a considerable amount, the acreage is 70 per cent. of last year's.

Canadian farmers threaten to feed barley to their cattle instead of buying Western corn, of which that country imports annually some three million bushels. It is thought by them that they can substitute barley for corn with good success.

The Kansas City *Star* recently said: "Oats are now 2 cents a bushel higher in Kansas City than in Chicago, 1 cent higher than in St. Louis. The crop in this part of the country did not suffer quite so much from last summer's drouth as in other parts. But there is an almost

unprecedented demand for the grain from the South and the far West."

If you have any news, facts or fiction, that will be of interest to our readers, let us have it. We offer the free use of our columns to those who have anything to say that will be of interest to persons connected with the elevator and grain trade.

It is a somewhat surprising fact that notwithstanding the admitted small oat crop this year the receipts at the eight primary points from July 1 to Nov. 1 were 5,000,000 bushels more than on the large crop of 1889, and 3,000,000 bushels more than in 1888.

The large amount of wheat harvested in the Red River Valley, N. Dak., has caused an unprecedented demand for cars upon the Great Northern and Northern Pacific railroads. There is talk of erecting a 5,000,000 grain elevator at Grand Forks to store a part of the crop.

W. S. Pirie & Co., commission merchants, Milwaukee, Wis., write us: "The October issue of the AMERICAN ELEVATOR AND GRAIN TRADE is before us, and as usual it contains a large amount of good reading matter for grain men. We think none of them should be without it."

The visible supply of grain, according to the New York Produce Exchange, was on Nov. 8: Wheat, 22,699,747 bushels, increase 1,464,366; corn, 6,885,063, decrease 632,272; oats, 3,986,231, decrease 175,026; rye, 706,001, decrease 10,320; barley, 4,720,288, decrease 126,291.

The Chamber of Commerce of Yankton, S. Dak., has sent out an address to the public, loudly protesting against the "untruthful and damaging statements as to the failure of crops in South Dakota, and especially so regarding the counties of the southeastern portion of the state."

Palouse district, Wash., had some remarkable yields last harvest. E. H. Northcutt produced 101 bushels wheat on one acre, J. S. Klemgard 73 bushels, and Frank Hill 66 bushels per acre. Some excellent flax, oats and barley were grown there, and oat straw measuring 8 feet in length.

No man ever knew so much about his business that nothing remained to be learned, and the man who knows the most about his business has the best chance of success, therefore every man connected with the elevator and grain interests should read the AMERICAN ELEVATOR AND GRAIN TRADE.

The writer hereof has recently seen some wheat which is very near the jointing stage. Farmers ought to be very careful about this, and keep the plants pastured down so as to prevent jointing before spring. Jointed wheat in the fall is equivalent to a failure, so far as the production of grain is concerned.—*Kansas Farmer*.

According to the inspector's report the receipts of flaxseed at Chicago during the first ten months of this year amounted to 5,597,000 bushels, against 3,593,000 bushels for the same months of 1889. The shipments for the first ten months of this year amounted to 3,567,623 bushels, against 2,158,719 bushels for same months of 1889.

The Chicago elevators had in store Nov. 8, 4,982,088 bushels of wheat; 1,552,231 bushels of corn; 859,203 bushels of oats; 324,065 bushels of rye, and 758,487 bushels of barley, against 2,841,289 bushels of wheat; 957,676 bushels of corn; 2,624,555 bushels of oats; 392,442 bushels of rye, and 315,641 bushels of barley, on Nov. 7, 1889.

Messrs. Leventon & Co. of Liverpool have just received from Egypt a consignment of nineteen tons of embalmed cats, which are to be used as manure. That settles it. Now that a new use has been found for cats besides catching mice and supplying back-yard music, it is to be hoped that this much abused animal will be properly appreciated and treated more felicitously hereafter. By the way, how would it do to embalm a few bulls on grain to display as freaks in the future?—*New York Produce Exchange Reporter*.

The trade papers are an oasis in a time like that through which we have just passed. The daily and weekly newspapers for months past have been freighted with very little else besides political news and discussions. Business men have found their surcease from this sort of thing in their trade papers which leave this sort of thing alone. But no one will be more rejoiced than the exchange editor who wades through hundred of papers all filled with little else besides political matter. Let us be thankful that for one to two years—according to location—there will be no more of the same sort of thing.—*Exchange*.

NORTH DAKOTA'S WAREHOUSE LAW.

[Continued from August issue.]

SECTION 16. The commissioners of railroads shall appoint in all cities where there is a state inspection of grain a state weighmaster and such assistants as shall be necessary.

SEC. 17. Said state weighmaster and assistants shall, at the places aforesaid, supervise and have exclusive control of the weighing of grain and other property which may be subject to inspection; and the inspection of scales and the action and certificate of such weighmaster and assistants in the discharge of their aforesaid duties shall be conclusive upon all parties in interest.

SEC. 18. The commissioners of railroads shall fix the fees to be paid for the weighing of grain or other property, which fees shall be paid by the warehouseman, and may be added to the charges for storage.

SEC. 19. Said state weighmaster and assistants shall not be a member of any board of trade or association of (any) like character. They shall give bonds in the sum of five thousand dollars (\$5,000), conditioned for the faithful discharge of their duties, and shall receive such compensation as the commissioners of railroads shall determine.

SEC. 20. The commissioners of railroads shall adopt such rules and regulations for the weighing of grain and other property as they shall deem proper.

SEC. 21. In case any person, warehouse or railroad corporation, or any of their agents or employees, shall refuse or prevent the aforesaid state weighmaster or either of his assistants from having access to their scales in the regular performance of their duties in supervising the weighing of any grain or other property in accordance with the tenor and meaning of this act, they shall forfeit the sum of one hundred dollars (\$100) for each offense, to be recovered in an action of debt before any justice of the peace, in the name of the state of North Dakota, such penalty or forfeiture to be paid to the state treasurer for the benefit of the grain inspection fund, and shall also be required to pay all costs of prosecution.

SEC. 22. It shall be the duty of the commissioners of railroads to appoint a suitable person as chief inspector of grain in the state of North Dakota, who shall hold his office for the term of two (2) years, unless sooner removed by said commissioners of railroads, who shall, before entering upon the duties of his office, take an oath of office, as in case of other state officers, and shall execute a bond to the state of North Dakota in the penal sum of ten thousand (\$10,000) dollars, with good and sufficient sureties, to be approved by the commissioners of railroads, conditioned that he will faithfully and impartially discharge the duties of the office of chief inspector according to law and the rules and regulations of said commissioners of railroads, and that he will pay all damages to any person or persons who may be injured by reason of his neglect or failure to comply with the law or the rules and regulations aforesaid.

SEC. 23. Said chief inspector shall appoint, subject to the approval of the commissioners of railroads, such number of deputy inspectors as may be required. One of which deputies in each of the cities of Grand Forks, Fargo, Wahpeton and Fairmount shall be denominated and styled chief deputy.

SEC. 24. Such deputy inspectors shall take a like oath of office to that required from the chief inspector, and shall give a bond to the state of North Dakota in the penal sum of five thousand (\$5,000) dollars, with such good and sufficient sureties as may be approved by the commissioners of railroads, and conditioned in like manner as the commissioners of railroads require from the chief inspector.

SEC. 25. The bonds given by the chief inspector and the deputy inspectors shall be filed in the office of the secretary of state for the state of North Dakota, and suit may be brought upon said bond or bonds in any court having jurisdiction thereof for the use of the person or persons so injured.

SEC. 26. The chief inspector shall have power to remove any of the deputy inspectors at pleasure, and said deputy inspectors shall act under the immediate control and supervision of said chief inspector.

SEC. 27. The chief inspector of grain and all deputy inspectors shall be governed in their inspection duties by such rules and regulations as may be provided by the commissioners of railroads, and the said commissioners shall have power to fix the rate of charges for inspection of grain, and the manner in which the same shall be collected, and which charges shall be regulated in such manner as will, in the judgment of said commissioners, produce sufficient revenue to meet the necessary expenses of the inspection service, and no more. Said commissioners of railroads shall fix the amount of compensation to be paid to the chief inspector and deputy inspectors, and prescribe the time and manner of payment thereof; which compensation shall be paid out of the grain inspection fund, hereinafter created, on the order of the commissioners of railroads.

SEC. 28. No chief inspector or deputy inspector of grain shall, during his term of service, be interested directly or indirectly in the handling, storing, shipping, purchasing or selling of grain; nor shall he be in the employment of any person or corporation interested in the handling, storing, shipping, purchasing or selling of grain.

SEC. 29. Upon complaint in writing of any person to the commissioners of railroads, supported by reasonable and satisfactory proof, that the chief inspector or any of his deputies have violated any of the rules prescribed for

his government, or has been guilty of any improper official act, or has been found inefficient or incompetent for the duties of his position, said person shall be by said commissioners of railroads immediately removed from office.

SEC. 30. Any person who shall assume to act as an inspector of grain, who has not first been so appointed and sworn, shall be held to be an imposter, and shall be punished by a fine of not less than fifty (50) dollars, nor more than one hundred (100) dollars, for each and every attempt to so inspect grain, to be recovered before a justice of the peace in an action of debt in the name of the state of North Dakota for the use of any person choosing to sue.

SEC. 31. Any duly authorized inspector or deputy inspector of grain who shall be guilty of any neglect of duty, or who shall knowingly or carelessly inspect or grade any grain improperly, or who shall accept any money or other consideration, directly or indirectly for any neglect of duty or any improper performance of duty as such inspector of grain, or any person who shall improperly influence any inspector of grain in the performance of his duty as such inspector, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than one hundred (100) dollars nor more than one thousand (1,000) dollars, or shall be imprisoned in the county jail not less than thirty (30) days nor more than one (1) year, or both, in the discretion of the court.

SEC. 32. The charge for the inspection and weighing of grain shall be and constitute a lien on grain so inspected, and whenever such grain is in transit the said charges shall be treated as advanced charges, to be paid by the common carrier in whose possession the same is at the time of inspection.

SEC. 33. The decision of the chief inspector or any of the deputy inspectors as to the grade of grain shall be final and binding on all parties, unless an appeal is taken from such decision, as hereinafter provided.

SEC. 34. In case any owner, consignee or shipper of grain, or any warehouse manager shall be aggrieved by the decision of the chief inspector or any of his deputies, an appeal may be had to the commissioners of railroads and a decision of a majority of such commissioners shall be final, and the commissioners of railroads are authorized to make all necessary rules governing such appeal; provided, that the party appealing shall pay to the chief inspector a sum not to exceed five (5) dollars per case before said case be entertained, which sum shall be refunded in case such case is sustained.

SEC. 35. In case any owner or consignee of grain shall be dissatisfied with the inspection of any lot of grain, or shall from any cause desire to receive his property without its passing into store, he shall be at liberty to have the same withheld from going into any public warehouse (whether the property may have been consigned to such warehouse or not) by giving notice to the person or corporation in whose possession it may be at the time of giving such notice; and such grain shall be withheld from going into store and be delivered to him, subject only to such proper charges as may be a lien upon it prior to such notice the grain in railroad cars to be removed therefrom by such owner or consignee within twenty-four (24) hours after such notice has been given to the railroad company having it in possession. Provided, such railroad company placing the same in a proper and convenient place for unloading; and any person or corporation refusing to allow such owner or consignee to receive his grain shall be deemed guilty of conversion, and shall be liable to pay such owner or consignee double the value of the property so converted. Notice that such grain is not to be delivered into store may also be given to the owner or manager of any warehouse into which it would otherwise have been delivered, and if, after such notice, it be taken into store in such warehouse the proprietor or manager of such warehouse shall be liable to the owner of such grain for double its market value.

SEC. 36. It shall be unlawful for any proprietor, lessee or manager of any public warehouse to enter into any contract, agreement, understanding or combination with any railroad company or other corporation, or with any individual or individuals, by which the property of any person is to be delivered to any public warehouse for storage or for any purpose, contrary to the direction of the owner, his agent or consignee.

SEC. 37. The commissioners of railroads shall before the fifteenth (15th) day of September in each year establish a grade for all kinds of grain, bought or handled by any public warehouse in the state, which shall be known as "North Dakota" grades, and the grades so established shall be published in some daily newspaper, in each of the three places of Grand Forks, Fargo, Wahpeton, each day, for the space of one week.

SEC. 38. It shall be the duty of the chief inspector of grain to furnish any elevator or warehouse in this state standard samples of grain as established by the official inspection, when requested so to do by the proprietor, lessee or manager thereof, at the actual cost of such sample.

SEC. 39. It will be the duty of the commissioners of railroads to assume and exercise a constant supervision over the grain interests of this state, to supervise the handling, inspection, weighing and storage of grain, to establish all necessary rules and regulations for the weighing, grading, inspection and appeal on inspection of grain, and for the management of the public warehouses of the state as far as such rules and regulations may be necessary to enforce the provisions of this act, or any law of this state in regard to the same, to investigate all complaints of fraud or oppression in the grain trade, and to correct the same as far as it may be in their power,

SEC. 40. The aforesaid rules and regulations not being contrary to the provisions of law, shall be published, by said commissioners of railroads, in a daily paper in Grand Forks, Fargo, Wahpeton and Fairmount, and shall be in force and effect until they shall be changed or abrogated by said commissioners in a like public manner.

SEC. 41. All moneys collected by state grain inspectors, weighmasters, and other officers, as herein provided for, shall by them be paid into the state treasury.

SEC. 42. It shall be the duty of the treasurer of the state of North Dakota to receive all moneys aforesaid, and all fines and penalties collected by virtue of this act, and to keep a separate account of the same and to pay the same on the order of the commissioners of railroads, and not otherwise.

SEC. 43. The attorney-general of the state of North Dakota shall be ex officio attorney for the commissioners of railroads, and shall give them such counsel and advice as they may from time to time require, and shall institute and prosecute any and all suits which said commissioner of railroads may deem expedient and proper to institute, and he shall render to such commissioners of railroads all counsel, advice and assistance necessary to carry out the provisions of this act, according to the true intent and meaning thereof. In all criminal prosecutions against a warehouseman for the violation of any of the provisions of this act, it shall be the duty of the county attorney of the county in which such prosecution is brought to prosecute the same to a final issue.

SEC. 44. Nothing in this act shall be so construed as to prevent any person from selling grain by sample regardless of grade.

CANADIAN REBATE OF TOLLS ON OATS.

The Montreal correspondent of the *Toronto Globe* says: "The forwarders and grain men, after a long agitation, induced the government to grant to shippers of oats via the canal the same rebate of canal tolls as is allowed on other grain. Lately it has been a subject of general comment on the Corn Exchange that the allowance of the rebate of canal tolls on oats has been a complete failure, so far as the bringing of American grain for export via this route is concerned. Not a barge load of American oats has yet been brought down the canals this season. The grain merchants who interested themselves in the movement to induce the government to grant the rebate on oats state that there are large quantities of oats which would naturally come to Montreal for export were the freights lower. Shipping men explain that oats are placed in the lower holds of the steamships leaving the American ports, and as they require them to fill the space they take them at a very low rate of freight. There are plenty of deals offering at Montreal to fill the lower holds of steamships, and as deals pay better and are better freight than oats, there is no occasion for the shipping agents to offer lower rates for oats than for any other grain, so that all the labor of the grain men in obtaining the concession has ended in failure.

"OLD HUTCH" SELLS HIS COAT.

Rather a good story is told of "Old Hutch." He is a man of the extraordinary parsimonious habits, despite his vast fortune, and it is his boast that he never loses an opportunity for making a penny. Not long ago his son went to a prominent Chicago tailor with one of his father's overcoats on his arm. The newest coat at that time in possession of the millionaire had been in service about twelve years, and was shabby beyond redemption. The son had a beautiful new beaver coat built for his father. The tailor charged him \$70 for it. The coat was thrown in a heap on a chair near one of the windows, and the following day, as the son was walking down town with the wary old operator, he asked him to step into the tailor's a minute, while he tried on a new coat. While the son was trying on the coat, "Old Hutch" wandered around the shop, and finally pulled the newly-made overcoat from the chair, straightened it out, and looked it over. Then he slowly put it on, and found that it fit him perfectly. He walked up to the tailor and said:

"What is the price of this coat?"

"Well," said the tailor, who had agreed on \$70 as the price of the coat with the son, and who had already received \$35 from the young man as part payment for the coat, "I don't think I care to sell you that coat, Mr. Hutchinson."

"Why not?"

"It was made for another man, and left over on my hands. I should think you would prefer to have one made to order."

The old man scented a bargain, and after haggling around for half an hour, secured the coat for \$25, paid the cash, gave his son the old overcoat to carry, and proceeded down to the Board of Trade. Two minutes after he had entered the building, a broker approached him and said pleasantly:

"That's rather a neat looking coat you have on, Mr. Hutchinson."

"Well, yes," replied the old man, with a look of gratified pride, "it is rather comfortable. What would you say it was worth?"

"Well," said the broker thoughtfully, "I should say that the garment cost about \$65 or \$70."

"I paid twenty-five for it."

"Give you thirty," said the broker promptly.

"I'll take it," said "Old Hutch," peeling off the coat at once. "Here, my son, give me my old coat."

Fires, Casualties, Etc.

Stone & Co.'s distillery at Viola, Ark., has been burned.
Stoll's brewery at Truckee, Cal., was burned on Nov. 6.

Fire recently destroyed \$12,000 worth of hay at Stuart, Neb.

J. W. Blakeny's distillery at Camden, S. C., has been burned.

J. D. Baker & Co., grain dealers at Jacksonville, Fla., have sustained loss by fire.

George P. Copeland of Copeland & Son, grain dealers at Leadville, Colo., is dead.

R. E. Roberts, grain and lumber dealer at Arlington, Neb., has been burned out.

An unoccupied elevator in Detroit, Mich., was damaged by fire Nov. 10. Loss \$500.

J. W. Cardner & Co.'s elevator at New London, Iowa, has been burned. Loss \$3,000.

Herbert S. King of Manderville & King, seedsmen at Rochester, N. Y., died recently.

A daughter of C. H. Graves, the elevator man of Clearwater, Minn., died Oct. 9 of typhoid fever.

Brooke & Pugh, grain and flour dealers at Philadelphia, Pa., have been burned out. Fully insured.

The Limiger & Metcalf elevator at Elmwood, Neb., was recently damaged by fire to the extent of \$200.

A building belonging to the Huntington Bagging Company at Huntington, Ind., was burned Oct. 23.

A son of John Smith, a grain dealer of Conrad, Iowa, was recently thrown from his horse and badly injured.

Hunters set fire to 12,000 tons of hay in Northern Indiana, and it was completely destroyed. Loss \$100,000.

Raymond Bros., grain and feed dealers at South Norwalk, Conn., have sustained loss by fire. Fully insured.

J. H. Dole & Co.'s grain elevator in Princeton, Ill., was burned Nov. 11. Loss on building, \$30,000; insurance, \$10,000.

The elevator and mill at Edison, Neb., was burned on the morning of Oct. 17. A spark from a locomotive was the cause. Loss \$15,000; fully insured.

Joseph Price, grain buyer living at Pickrell, Neb., was recently shot in the foot by a shotgun, accidentally discharged. Amputation had to be resorted to.

William Conin, employed at the Corwith elevator in Chicago, slipped down a chute and was buried beneath several hundred bushels of grain. When dug out he was dead.

The Northern Pacific wheat elevator at Eureka Junction, Wash., was burned on the morning of Oct. 29, together with 60,000 bushels of wheat. The loss was \$100,000. Fully insured.

The warehouse at Newport, Ky., belonging to the George Weideman Brewing Company, was burned Oct. 27, together with 100,000 bushels of barley and malt. Loss \$100,000; fully insured.

Burglars broke into the store of Colburn, Phillips & Co., grain dealers at Hanover Four Corners, Mass., on the night of Oct. 4. They burst the safe and secured \$100 in cash, besides valuable papers.

Timothy Baker, a well known member of the Boston Chamber of Commerce, died Oct. 9, aged 76 years. He was one of the original members of the old Corn Exchange, and for the last thirty years was a prominent figure in the grain trade of that city.

Wm. W. Backus, grain dealer of Toledo, Ohio, died Oct. 26, of Bright's disease. He was 45 years of age and a member of the Toledo Produce Exchange. He was highly respected, and his honesty and capability won him many friends. He was born at Waterville, Ohio, in 1846, and went to Toledo in 1858. His death was a shock to all his acquaintances, by whom he was much beloved.

The Wells elevator at Buffalo, N. Y., owned by the Western Elevating Company, was burned at two o'clock of Nov. 6. The fire started in the east end of the building with an explosion. The building and contents were totally destroyed. The heat caused the side of the Marine elevator across the river to burst, letting the flaxseed pour out into the water. The contents, 290,000 bushels of grain, were completely destroyed, incurring a loss of about \$150,000; fully insured. The loss on building is \$100,000; insurance \$80,000.

Abner M. Wright, ex president of the Chicago Board of Trade, died Oct. 19, at his residence, 701 West Jackson street. Mr. Wright was born in Waterford, Vt., sixty-two years ago. He was teacher of mathematics and principal of the academy at Painesville, Ohio. He was afterward a clerk, managing editor of a campaign paper, telegraph operator and a bank teller. In 1859 he started

the firm of A. M. Wright & Co., with J. H. Miles as partner. Rollin Sherman and Dr. Jared Bassett joined the firm later on. The partnership was dissolved in 1863. Mr. Wright was in business with Horace Burton one year. The next year he was married to Helen S. Hickox, who now survives him with three children. Mr. Wright and Mr. P. Hickox formed a partnership and have done a large and prosperous business. He was active in politics.

WATERWAYS

The shipments of barley from Milwaukee to Buffalo during October were larger than ever before.

The Philip H. Armour, which was sunk over a year ago by a collision on Lake St. Clair and remained on bottom in 70 feet of water for many months, has been raised and repaired. Her cargo of corn was decayed.

The Board of Marine Underwriters at their last meeting adopted the following schedule of rates on trip cargoes: To Lake Superior ports, \$1.20; to ports on Lake Huron, Sarnia and Detroit River, 90 cents; to Georgian Bay ports, \$1; to Lake Erie ports, \$1; to Lake Ontario ports, \$1.20; to Montreal, \$1.50.

The largest cargo of corn ever carried on the great lakes in one boat was only 42 bushels short when it arrived at Buffalo. This of course was due to the dry atmosphere of the lakes causing the corn to shrink. When the America left Chicago it was credited with having 111,550 bushels; when it arrived at Buffalo it contained, according to Buffalo weights, 111,508 bushels.

By order of the Board of Canal Commissioners of Illinois, Mr. James M. Leighton, general superintendent, has issued the following notice: "The Illinois and Michigan Canal will be officially closed for navigation from Bridgeport to LaSalle on Saturday, Nov. 15, at midnight. If the weather permits, boats will be allowed to run after that date between Bridgeport and Channahon at owners' risk of being frozen in."

Work of a preliminary character, but quite important, is constantly going on in regard to the great ship canal, projected from Lake Erie to the Ohio River, says *Seaboard*. From surveys made it has been shown that the whole course of the proposed canal has been most carefully plotted. From Erie, Pa., (the Lake Erie terminus) to the mouth of the Beaver River, only forty-eight locks will be required—and this route has been practically settled upon.

The tallying business develops some strange freaks. For some time the propeller R. Mills has been rather short for comfort, and at length her owners were asked to change their tallyman in Chicago. They did so, and on Saturday the Mills overran 62 bushels. The propeller Colgate Hoyt, which was 256 bushels short on her former Duluth wheat cargo, would have overran about 25 bushels this time but for a small amount of wet in her cargo.—*Buffalo Express*.

In speaking of the Hennepin Canal L. T. Eads, C. E., says: I have given the location of the Hennepin Canal considerable thought, and with all the surveys before me, with a knowledge of the topography of the country, and a familiarity with the necessities of commerce, I am forced to the conclusion that the route via Watertown to the terminus "at or above the city of Rock Island" (in the language of the act) should be finally adopted by the Secretary of War.

Europe is furnished with natural and artificial waterways, so must America be in order to reap the full benefits of transportation facilities. River transit in this country never passed beyond the days of swaddling clothes, and its long neglect has given other lands a long lead and great advantage, but as American invention surpasses that of other lands in all other branches, so it will surpass all others when it turns its attention earnestly to water transit.—*Omaha World-Herald*.

The ship Anson Burrell is now being loaded with grain in this harbor from Eastern Washington for England. This is the first ship—the commencement of a long line of deep sea vessels which shall hereafter annually sail from Seattle docks laden with grain. It is an event full of significance to this city. Now that the construction of railroads has placed this city in a position of equality a matter of advantage over other upper coast shipping ports, the foreign grain trade may be expected to develop rapidly.—*Seattle Press*.

In accord with a request from the secretary of the Cleveland Vessel Owners' Association Wiley M. Eagan of Chicago made an investigation of the proposed Hennepin Canal measure last spring, with the result that nothing inimical to the interests of lake tonnage was found to be involved in the Hennepin Canal scheme as then under discussion.

Few people realize the importance of South Chicago as a shipping port. There were 122 arrivals there last month, just from American ports, and their aggregate tonnage was 117,295 tons, an average tonnage of 961 tons for each vessel. The aggregate tonnage of the eighty-four steam vessels was 106,290 tons, an average of 1,275 tons each. The aggregate tonnage of the thirty-eight sail vessels was 11,005 tons, or an average of 289.6 tons

each. During the month of October there were 1,071 arrivals in Chicago from American ports. The average tonnage was 508.35 tons each. The aggregate tonnage was 544,452 tons. There were 579 steam vessels, tonnage 415,600, an average of 717.77 tons each. There were 492 sailing vessels, tonnage 128,852, an average of 261.88 tons each.

A steam vessel with a party of government engineers, has passed through the Mussels Shoals Canal on the Tennessee River, thus practically opening navigation on that river from Chattanooga to its mouth. The formal celebration of the completion of the improvement was held Nov. 12. The importance of the work, which has been under way for many years, can scarcely be overestimated. It practically places Chattanooga and Southeastern Tennessee on a par with Pittsburgh as to communication by water with the Mississippi River and its branches.

The Hennepin project contemplates a large canal 80 feet wide at the surface and 7 feet deep, with locks 170 feet long and 30 feet wide running from the Illinois River at Hennepin to the Mississippi River, at or near Rock Island, several other projects have, however, been submitted, notably among which may be mentioned the Wilson-Gooding one, which contemplates a 7-foot navigation, with locks 350 feet long by 75 feet wide. The river bed to be used below Joliet, thence to Lake Michigan by a canal fed directly from the lake at or near Chicago.

If the Chignecto Ship Railway, which is now being constructed from the Bay of Fundy to the Gulf of St. Lawrence, proves a success, it is probable that capital will be found for the project for connecting lakes Huron and Ontario. A ship railway there, 69 miles long, would save 428 miles to lake commerce. Twenty-five years ago influential men of American and Canadian lake ports met at Toronto to devise some way of overcoming the obstacles presented by the restricted draught of the Welland Canal, and they decided that the immediate construction of a canal big enough to pass vessels of 1,000 tons was needed. A survey showed that such a canal would cost about \$24,000,000, which put it out of the question. The ship railway now proposed would probably not cost over \$12,000,000, and would carry the largest lake boats, weighing possibly 5,000 tons loaded. The heaviest grade would be 30 feet to the mile, and the ridge would be crossed at a height of 327 feet above Georgian Bay.

Work on the Chignecto Ship Railway, which is being built from the Baie Verte to the Bay of Fundy, has been pushed with great vigor during the past summer, and it is expected that the road will be tested soon. At the Bay of Fundy terminus the lifting dock will have twenty hydraulic presses, which will raise the vessel 40 feet. The maximum weight to be raised is 3,500 tons, which includes the "grid-iron," the cradle, and a loaded vessel of 2,000 tons displacement. The railway is perfectly straight. There are four rails, weighing 110 pounds to the yard, laid in two standard gauge tracks with their centers 18 feet apart. Two powerful locomotives will haul the largest vessel that will be carried on the railway at a rate of ten miles an hour. It is expected that the raising, transportation and lowering of the vessels will all be accomplished inside of two hours. Arrangements have been made to permit the passage of vessels in opposite directions by means of traversing tables, so that they can be carried across at very short intervals.

PERSONAL

Jones of Binghamton, "he pays the freight," is lieutenant-governor of New York.

Edward Marfield of Galena, Ill., fell in his grain warehouse and ran a nail into his knee. It resulted in a bad swelling.

Lew Steward, elevator and mill owner of La Salle county, Ill., will probably be sent to the United States Senate by the next Illinois Legislature.

Mr. Lloyd J. Smith, manager of the Chicago Elevator Company and the Santa Fe Elevator and Dock Company, was married to Miss Sadie B. Hall, Oct. 15, in Chicago.

Board of Trade Scalper Charley Counselman is one of the best known men on the Chicago Board. When he goes down to New York the fellows on Wall street begin to put up their umbrellas. They call him "Old Brains." I don't know the origin of the appellation. Some say he was called that in the early days in Chicago. It may have a history back of it, for all I know. But he is known better in New York as "Old Brains" than he is as Charley Counselman.

The Duluth grain men are getting up a vigorous kick over what they term the shilly shally policy of the Great Northern Road in delivering cars to their elevators. First the cars were delivered free of switching charges; then they paid \$1.50 for each car, and now, before cars can be brought over from West Superior, regular shipping bills have to be made out the same as those made by the original consignor of the wheat.

ELEVATOR AND GRAIN NEWS

O'Neill, Neb., wants a starch factory.

An elevator has been built at Olathe, Kan.

A rice mill will be built at Macclenny, Fla.

P. H. Rice will build a brewery in Chicago.

A broom factory will be built at Jackson, Miss.

A broom factory will be built at Henrietta, Tex.

Jackson Koehler will build a brewery at Erie, Pa.

A grain elevator has been erected at Eudora, Kan.

A grain elevator is being built at Fox Warren, Man.

Almota, Wash., is doing a very good grain business.

A cotton-seed oil mill will be erected at Luling, Tex.

Davis Bros. of Berryville, Ark., will erect a distillery.

John Seiler will rebuild his brewery at Covington, Ky.

A starch factory is being built at Sioux Falls, S. Dak.

T. J. Hillburn & Co. will erect a distillery at Folsom, Ga.

A cotton-seed oil mill will probably be built at Terrell, Tex.

W. H. Chisolm will erect a broom factory at Henrietta, Tex.

John Mattes will build a brewery at Nebraska City, Neb.

J. J. Hamilton is erecting an elevator at Neepawa, Man.

Gross & Duenser will build a brewery at Des Moines, Iowa.

Wood's starch factory at Columbus, Ohio, has shut down.

A distillery will probably be erected at North Yakima, Wash.

August A. Fischer will build a brewery at Bellevue, Idaho.

The Advance Elevator in Chicago has been sold at auction.

The Farmers' Alliance at Ramona, Dak., is building an elevator.

The Fecker Brewing Company will build a brewery in Chicago.

A. M. Armstrong, grain dealer at Owasso, Mich., has sold out.

O. A. Cooper, grain dealer at Crab Orchard, Neb., has sold out.

Hurman & Co will build a broom factory at Basic City, Va.

J. H. Lawson will build a cotton-seed oil mill at Talladega, Ala.

J. D. Sibbald has purchased the grain elevator at Regina, Assa.

William Bahnholzer is enlarging his brewery at St. Paul, Minn.

The Gottfried Brewing Company of Chicago will build a malt house.

Wangerein & Saeger are enlarging their elevator at Vining, Kan.

B. U. Dye & Son, grain dealers at Rocky Ford, Colo., have sold out.

A cotton-seed oil mill and grist mill is being erected at Tredegar, Ala.

Roblin & Atkinson are building a grain warehouse at Elkhorn, Man.

John G. Roach is erecting the Rich Grain Distillery at Louisville, Ky.

The Nanaimo Brewing Company has been registered at Nanaimo, B. C.

A stock company will build a cotton-seed oil mill at West Point, Ga.

The City Brewing Company of Detroit, Mich., will erect a brewery.

The Schellhas Brewing Company at Ogden, Utah, will build a brewery.

The American Brewing Company will build a brewery at Boston, Mass.

The Farmers' Alliance will build a cotton-seed oil mill at Anderson, Ga.

Miller F. Hageman, grain dealer, Jules, Cass Co., Ill., recently left for parts unknown, leaving behind a shortage of \$10,000 due to farmers for grain. Mr. Hageman

was for twenty years a respected business man in that region.

The Werner Brewing Company will build a brewery at Half Moon, N. Y.

An addition has been made to the Whitney Elevator B at Rochester, N. Y.

Simon Goodkind, a young grain broker of Sacramento, Cal., has absconded.

The St. Louis Breweries Company at St. Louis, Mo., will build a brewery.

A starch factory will probably be built at Augusta, Ga., by W. F. Parks.

The Augusta Brewing Company at Augusta, Ga., is enlarging its brewery.

A grain elevator is being built at Hesston, Kan., by G. P. Watson of Newton.

Preston & McKay of Boissevain, Man., are erecting a 30,000-bushel elevator.

The hemp mill at Fremont, Neb., has started up and will now keep running.

Dines & Cleveland have leased Powers' grain warehouse at Elkhorn, Man.

Northern Iowa grain shippers complain of limited transportation facilities.

The Prospect Brewing Company at Philadelphia, Pa., is enlarging its brewery.

The Logansport Brewing Company at Logansport, Ind., will enlarge its brewery.

The Old Times Distillery Company of Louisville, Ky., is enlarging its distillery.

Farmers around Ava, Ill., are having trouble with weevils in their granaries.

Dennis & Ager have started a grain, lumber and coal business at Kilduff, Iowa.

E. N. Offutt & Co. will erect a 75,000-bushel grain elevator at Georgetown, Ky.

Macomber Bros., grain dealers at New Bedford, Mass., have made an assignment.

Rosenheimer's 100,000-bushel elevator at Kewaskum, Wis., is now in operation.

White & Howard, grain dealers at Wyoming, N. Y., have dissolved partnership.

Pickens & Chamberlain, grain dealers at Powell, Neb., have dissolved partnership.

The Chattanooga Brewing Company of Chattanooga, Tenn., will build a brewery.

The Robert Portner Brewing Company of Alexandria, Va., will enlarge its brewery.

N. Bawlf & Co. have leased Buchanan & Co.'s grain warehouse, at Saltcoats, Assa.

A stock company will be organized to erect a cotton seed oil mill at St. Joseph, La.

The Manitoba Road has been connected with elevators "E" and "H" at Duluth, Minn.

The Cheboygan Brewing Company at Cheboygan, Mich., is enlarging its brewery.

McKenna & Purcell, grain dealers at San Francisco, Cal., have dissolved partnership.

Wipper & Moore, grain and flour dealers at Cincinnati, Ohio, have dissolved partnership.

J. W. Carden will rebuild his elevator at New London, Iowa, which was recently burned.

Hay Bros. of Listowel, Ont., have recently started a 100,000-bushel elevator at Moorfield.

The Northern Pacific Elevator Company is enlarging its warehouse at Palouse City, Wash.

The Halifax Distillery Company has been organized at Halifax, N. S., with \$400,000 capital.

Brock & Rutledge will erect a cotton-seed oil mill and fertilizer factory at Summerton, S. C.

Thompson & Hyde, grain commission dealers at Houston, Tex., have dissolved partnership.

R. T. Alvey & Co., grain and feed dealers at Richmond, Va., have dissolved partnership.

The new elevator at Martinville Station, Man., has already received a large amount of wheat.

An unsuccessful attempt was made to rob the store of the Portsmouth, N. H., Grain Company.

Brandin & Grqs, grain commission dealers at New Orleans, La., have dissolved partnership.

The Empire Brewing Company has been incorporated at Nashua, N. H., with \$150,000 capital.

William & Bush, proprietors of a rice mill at New Orleans, La., have dissolved partnership.

The New York Central's new elevator, City B, at Buffalo, N. Y., has been placed in operation.

The Midway Elevator Company has been incorporated at Minneapolis, Minn., with \$50,000 capital stock. The directors are S. S. Linton, W. D. Gregory and E. H.

Gregory. The elevator will be built between the Union and Pillsbury elevators.

George Schei of Primghar, O'Brien county, Iowa, has sold his half interest in the elevator there.

John A. Warren & Co., grain commission dealers at St. Louis, Mo., have dissolved partnership.

George D. Calvert of Green Ridge, Mo., has entered the grain and lumber business at that place.

The Overbeck Brewing and Cold Storage Company at Middleborough, Ky., is building a brewery.

A grain and hay warehouse is being built at Island City, Ore., by W. G. Hunter and B. Brown.

The Southern Distilling Company has been incorporated at Dallas, Tex., with \$150,000 capital.

The sum of \$7,500 has already been subscribed by the farmers at Hooper, Neb., for a grain elevator.

Mr. Howard of White & Howard, grain dealers at Wyoming, N. Y., will build a grain elevator.

The Griffiths-Marshall Grain Commission Company of Minneapolis, Minn., is financially embarrassed.

The Independent Brewing Association has been incorporated at Chicago, Ill., with \$500,000 capital.

Neilander & Brockhausen, grain dealers at Lansing, Iowa, have been succeeded by Neilander & Co.

F. G. Tilden, grain and feed dealer at New Westminster, B. C., has established a branch at Nanaimo.

T. E. Wykes & Co., grain, feed and lumber dealers at Grand Rapids, Mich., have dissolved partnership.

H. M. Winsor, grain, flour and feed dealer at Mauston, Wis., has been succeeded by Godhouse & Ritter.

A 20,000-bushel elevator has been built at Muskogee, Ind. Ter., for the Muskogee Roller Mill Company.

Wm. J. Goodwin of T. F. Potter & Co., grain dealers at San Francisco, Cal., sues to dissolve partnership.

An elevator and mill will be built at Williamsport, Pa., by W. M. Hodge, formerly of North Adams, Mass.

W. M. Bressler & Co., grain and lumber dealers at Elgin, Neb., have been succeeded by George Graves.

Dines & Cleveland have leased a grain elevator at Niverville, Man. R. C. Ennis will buy wheat for them.

A 100,000-bushel grain elevator is being built by the Northwestern Elevator Company at Minneapolis, Minn.

Canton, Iowa, is to have a \$25,000 starch plant. The factory will have a capacity of 500 bushels of corn a day.

The Piedmont Manufacturing Company has been incorporated at Gordonsville, Va., to manufacture brooms.

S. C. Hunt & Son will erect a 100,000 bushel grain elevator in connection with their flour mill at Lynchburg, Va.

Farmers near Valley Springs, Dak., are building granaries for their grain, instead of hauling it to the elevators.

An annex to the C. P. R. Elevator is being erected at Fort William, Ont., to have a capacity of 1,300,000 bushels.

The Fowler-Anderson Company, grain and provision dealers at New York City, have been succeeded by Fowler Bros.

A starch mill will be erected at Lake Charles, La., by H. E. Jones of Cedar Rapids and C. H. Ilgenfritz of Clarksville, Iowa.

A. J. Hughes and Rufus Atkinson have formed a partnership at Souris, Man., as Hughes & Atkinson, to deal in grain and lumber.

The American Fabric Association will erect flax mills in Minnesota and Dakota. This will encourage farmers to produce more flax.

The American Brewing Association has been incorporated at San Francisco, Cal., with \$3,000,000 capital, to build a large brewery.

A. J. Cutler, late of S. V. White & Co., grain dealers at Chicago, has gone into business for himself, under the name of A. J. Cutler & Co.

The case of Schoellkopf & Mathews and the Central Milling Company against A. P. Wright & Son is again in the courts at Buffalo, N. Y.

The New York Central Railroad's elevator City "B" in Buffalo, N. Y., which has a capacity of 800,000 bushels, was recently placed in operation.

J. H. Gendron, grain and flour dealer at Sherbrooke, Que., has failed. Liabilities, \$100,000; assets less than \$30,000.

O. D. Wyckham, dealer in grain, feed, lumber and coal at Middletown, N. Y., has made an assignment. Liabilities \$20,000; assets \$15,000.

The Mutual Fire Insurance Company of Chicago has made an assignment, with liabilities of \$57,600 and \$25,000 in contested claims against the company.

George G. Stratton, the New Orleans grain inspector, who is also connected with the Southport Elevator Company, says that the river route will be very popular with grain shippers next year on account of the excellent

quality of the 2,000,000 bushels of wheat and 14,000,000 bushels of corn which was shipped through New Orleans this year.

Webster Mull, the Gardner, Dak., agent of the St. Anthony and Dakota Elevator Company, who absconded, has been captured in Mexico and taken to Gardner.

The Grand Trunk Railway Company's elevator at Midland, Ont., is fully engaged for both storage and transportation up to the close of navigation of this season.

Owing to a lack of cars for shipping, grain has accumulated in the Buffalo, N. Y. elevators, causing consignees a great amount of trouble in finding room for the storage of their grain.

Robert Mackinnon, formerly connected with the Washburn Mill Company of Minneapolis, recently entered into a partnership with Griswold & Pearl, grain and flour dealers at St. Johnsbury, Vt.

C. F. Reynolds of Chicago asks the Circuit Court to set aside a judgment for \$1,459.08, secured on a note given to Jerome J. Steever, on the ground that it was given on a gambling contract.

The farmers of Three Rivers, Que., have been ordered by their bishop to pay their taxes on hay instead of grain, because they had taken to hay-growing to avoid the tax. The new tax is about 7 per cent.

Barnett & Record, elevator builders of Minneapolis, Minn., had \$35,000 worth of lumber in the barge Wahnapitae, which was wrecked off the Cleveland, Ohio, breakwater Oct. 26. The cargo was insured for \$17,500.

H. W. Rogers & Bro. of the Chicago Board of Trade has obtained a judgment for \$3,500 against Samuel P. McGill of Fargo, N. D., who speculated in wheat and tried to avoid payment by pleading it was a gambling contract.

S. W. Lamson & Co., grain dealers at Chicago, have secured an injunction restraining R. W. Dunham & Co., and the Western Union Telegraph Company from cutting off the use of a private wire to Louisville and Nashville, used by both firms in common.

George S. Barnes, the elevator man of Minneapolis, Minn., has brought suit against F. H. Warren to recover \$3,500 on a promissory note, which defendant claims was given to Barnes merely as security in connection with a wheat deal, and not to be transferred.

The Menasha Wood Split Pulley Company of Menasha, Wis., has recently received orders for their hickory pulleys from the Logeman & Girsler Machine Company of Milwaukee, Wis.; Willimantic Silk Company, and Noble Sewing Machine Company of Norwich, Conn.

Tacoma, Wash., has a grain storage capacity of 2,500,000 bushels, of which the Tacoma Warehouse and Elevator Company has 1,250,000 bushels; the Northern Pacific Elevator Company, 650,000 bushels, and the Puget Sound Flouring and Warehouse Company, 600,000 bushels.

The Menasha Wood Split Pulley Company of Menasha, Wis., have received orders for their hickory pulleys from the Wheel and Seeder Manufacturing Company of La Crosse, Wis.; A. N. Lee, Arlington, Neb.; Bohn Manufacturing Company, St. Paul, Minn., and Boyd & Co., Dwight, Kan.

Mr. Rowe, grain buyer at Wilton, Iowa, is improving his elevator at that point. He will put a boiler and engine in the elevator, and will purchase new machines for cleaning barley, and expects to handle the lion share of the next crop. Already he has had farmers living a distance of twenty miles bring their barley.

This is the season of the year when corn cribs "groan," wheat "sweats," and elevators collapse under their heavy burdens. Many cases of the latter kind have already been noted. S. A. Nordyke, the millwright, has just gone to Gardner, Kan., to fix up Ward & Currier's elevator, which got so excited over the fluctuations of the wheat market that it just couldn't hold itself together.—*Modern Miller.*

A case of interest to grain dealers came up in the Division Court at Brantford, Ont., recently. A farmer named Leritt sold 350 bushels of barley to a Mr. Harold for 58 cents. He delivered one load to him, and then sold the remainder to a Mr. Wood at 60 cents. Mr. Harold refused to pay for the first load, and Leritt entered action. Mr. Harold also put in a claim of 4 cents per bushel for non-delivery. The counter claim was allowed.

The Louisville, Ky., correspondent of the *Tradesman* says: "The Kentucky Elevator Company are painting their elevator with graphite paint. Their building is about one hundred and fifty feet high, and about two hundred feet long and seventy-five feet wide. We have only two public elevators in the city that amount to anything, and the Kentucky Public is the largest, having twelve elevators all of which are over one hundred and fifty feet high, and use three hundred feet of 22-inch five-ply rubber belt."

Robert Irvine, a grain dealer at Apple River, near Galena, Ill., in the fall of 1888, when B. P. Hutchinson was cornering wheat, directed Mr. Louis P. Clingman, his broker at Chicago, to buy 5,000 bushels on every rise of $\frac{3}{4}$ cent. When Irvine had an assured profit of \$26,000 he wired Clingman to sell. Clingman wired back that he

could not as the firm had failed. Now Mr. Irvine sues Clingman for \$25,000. The latter alleges that Irvine did not put up the money required to carry the deals.

It has been known for some time that sneak thieves were pilfering corn and oats from the cribs and granaries of the grain merchants at Dallas Center, Iowa, and a few nights ago the sons of Mr. W. H. Brenton watched their crib with a view to detect the thief or thieves. About 12 o'clock they saw two parties coming from their crib each with a sack of corn. On being called on to stop, one of the men ran away, but was captured and taken before the mayor. He pleaded guilty, and was fined \$25. The other, a man having the reputation of being somewhat of a dangerous character, turned on the young men and was shot in the fleshy part of the leg, when he gave himself up.

ITEMS FROM ABROAD

The new tariff proposed in France levies a duty of \$1 on 220 pounds of wheat, \$1.60 on 220 pounds of wheat flour, 60 cents on 220 pounds of corn, and \$1 on 220 pounds of cornmeal.

The breadstuffs exported from South Australian ports during the first nine months of this year amounted to 206,000 tons. It is said that about 90,000 tons were still available for export.

It is said that New Zealand has 453,000 acres of flax land, and is destined at no very distant date to be one of the finest flax-producing fields in the world. Not five years ago she had only thirty flax mills; to-day she has 246, and others in course of erection.

It is estimated on what appears to be competent authority that the United Kingdom wheat crop is about 72,000,000 bushels after deducting the amount necessary for seed for 2,500,000 acres. On that basis the amount needed in imports would be 144,000,000 bushels.

The Lisbon correspondent of the London *News* says that the Portuguese Government has granted to a syndicate a monopoly on the importation of wheat, and that it has reduced the import duty on wheat in exchange for annual payment from the syndicate to the state treasury.

India's flax crop of 1890 was an unusually short one, as is shown by the United Kingdom's imports of flaxseed from that country for the seven months ending with September, which amounted to £48,266 quarters, against 969,696 for the same months of 1889, 911,203 in 1888, 869,232 in 1887, and 1,170,860 in 1886.

During August and September Hungary exported in the shape of flour and wheat the equivalent of 10,896,000 bushels of wheat. The most of it was shipped to Austria. During the year ending with July, Hungary exported wheat and flour together, 11,400,000 bushels, against 28,360,000 bushels for the preceding crop year.

During the cereal year lately ended France imported wheat and flour equal to 4,391,000 quarters, which compares favorably (as far as French interests are concerned) with the previous year, when the gross imports were 6,650,000 quarters. The yield of claret this year will be considerably less than for the past two or three seasons.

It is announced that the Spanish Government will request the United States Government to admit the products of the Spanish possessions in the West Indies, especially tobacco and sugar, without the recently imposed tariff restrictions. In the event of a refusal Spain, it is stated, will exclude American products, especially breadstuffs.

The tariff negotiations between Germany and Austria have resulted in a reduction to three marks of the duties on rye and wheat imported from countries having commercial treaties with Germany and Austria containing the favored-nation clause. This will include the imports of these cereals from the United States and exclude those from Russia.

Reports from India state that this year's crop of jute will be very short, and that prices will soon advance. Lack of rain, followed by incessant rains, damaged almost the entire crop. Insects injured the plants in a number of districts, and the eastern part of Bengal was flooded so that the roots rotted. This will surely cause a large rise in the price of jute in this country.

The effect of the establishment of elevators in Russia is advantageous to grain growers and dealers, who are now able to obtain advances of money on easier and more favorable terms than heretofore. It enables them to regulate their sales more in accordance with the demand for grain at the ports and in foreign markets. There still exists a prejudice on the part of native grain dealers against the use of the elevator. They cannot reconcile themselves to the idea of the loss they are convinced they sustain by the removal of the dirt from their grain.

The official report of the India Agricultural Department shows that India's wheat acreage and crop of 1890 was less than for several years. The acreage was 29,983,100 acres, against 25,911,700 for the preceding year, and an average of 26,506,100 for the five years ending 1888-'89. The crop was 6,303,900 tons, against 6,362,200 tons

for the preceding year, and an average of 7,259,300 tons for the five years ending with 1888-'89. During the crop year of 1890 only 690,000 tons of wheat were exported, against 880,000 for the preceding crop year.

Advices from St. Petersburg state that one of the noteworthy features of the present commercial depression in the grain trade of Russia is the decadence of the flour mill industry. Many of the mills belonged to the Jews, who, having been forbidden to live outside the limits prescribed for the residence of members of their faith, were compelled to give up business, and their mills are standing idle.

In accordance with a recent agreement between the Allen Steamship Company and the representatives of the striking grain porters, at the Albert docks in London, the matters at issue between the company and the men were submitted to a board of arbitration for settlement. The conclusions of the board proved unsatisfactory to the porters, who refuse to accept its award, and they have again gone on a strike.

The rye crop of Russia in 1887 amounted to 780,000,000 bushels, in 1881 to 752,000,000 bushels, in 1889 to 640,000,000 bushels, and this year's crop is now reported to be 112,000,000 bushels more than that of 1889; the crop of 1890 is therefore 752,000,000 bushels. The quantity of rye exported rarely exceeds 40,000,000 bushels per annum, the home consumption in the shape of bread and whisky absorbing over 700,000,000 bushels annually.

There is likely to be a change in the basis by which, for statistical purposes, the English Government has heretofore reduced flour to its equivalent in wheat. For years this has been computed on the basis of 80.8 of flour from a bushel of wheat. It has long been held that 72.5 was nearer the actual figure, and English officials have the subject under investigation and will probably reduce the figures. *Beerbohm* states that the present method of calculation makes the statement of imports far too low.

It seems clear that 170 years ago London was as much an exporter as an importer of cereals. The *Northampton Mercury* of Monday, May 2, 1720, contains a list of goods imported at London from April 14 to April (the latter date is illegible), and also a list of "Goods exported the same date." Under the first heading is no mention of cereals or cereal products, but in the list of exports we notice "260 qrs of wheat" to Dublin, and to Sweden and Sound "1,579 qrs. of malt, 1,740 qrs. of rye, 79 qrs. of meal, 337 qrs. of wheat," and an undefined number of "bushels of flower."

The steady decrease in the export trade of Russian grain, says the Odessa correspondent of the London *News*, is attracting the serious attention of the government. The total grain exports from the whole of Russia during the first six months of the current year amounted to 257,000,000 poods, during the same period last year to 310,000,000, and during the first six months of 1888 to 346,000,000 poods. Russian economists are at last awakening to the fact that American, Indian and Egyptian grain is rapidly depriving Russia of its former title of the granary of Europe.

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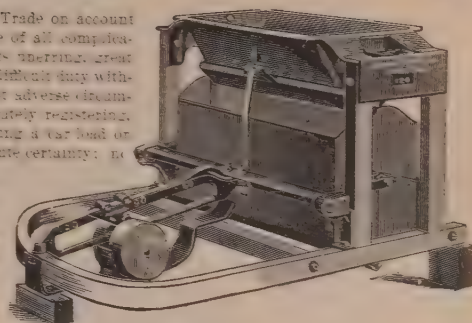
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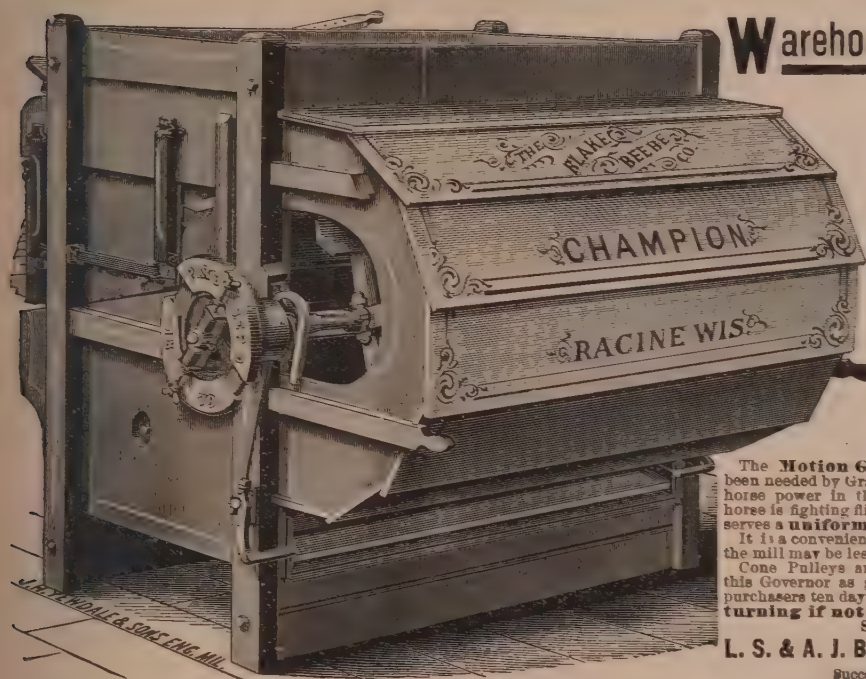
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600 BUSHELS
PER HOUR.

WE MAKE
Farm Mills and
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More of them in actual and satisfactory use than any other kind.

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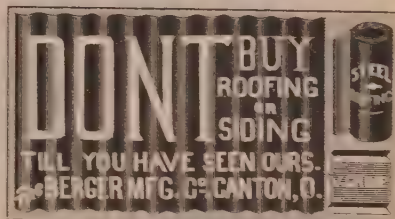
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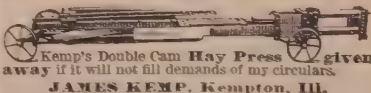
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DEAR SIRS:—In reply to your favor of Sept. 21, asking our experience with the 8 Automatic Grain Scales having a capacity of 75 tons each per hour, you furnished the Brinsk Iron & Machine Co. Limited, for the elevators built by them on the Russian Railways, I can state that they are working to our entire satisfaction, being very reliable and giving no trouble whatever.

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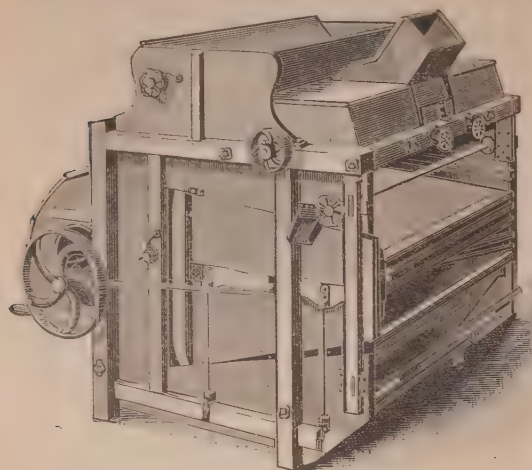
The "Chronos" Automatic Grain Scales we have in use have been working constantly since they started, and have saved us considerable time, labor and mistakes. Hoping you will meet with success in America, I am yours very truly, F. V. OSN.
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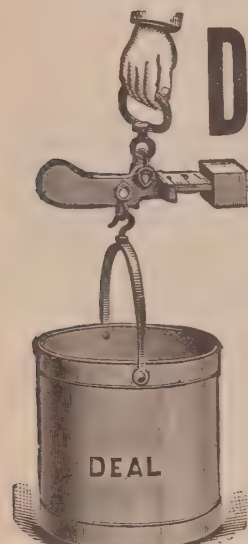
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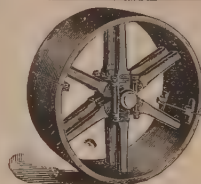
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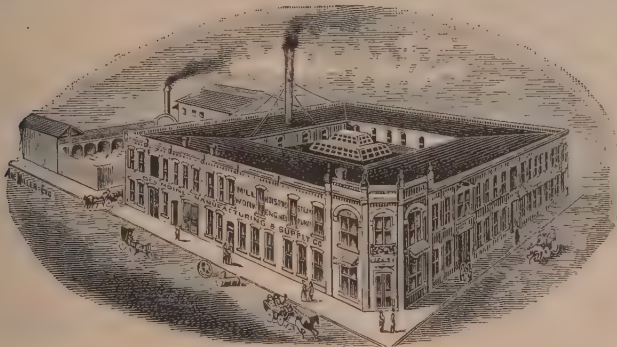
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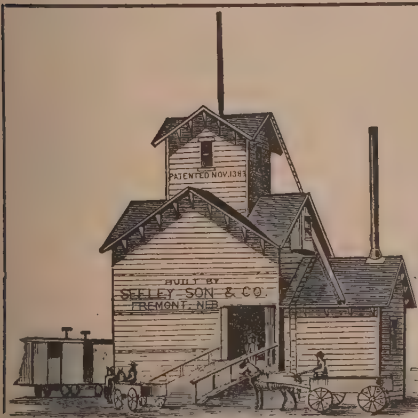
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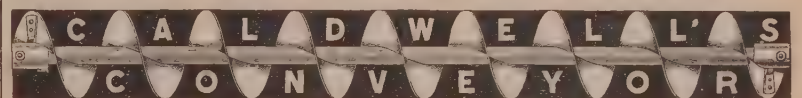
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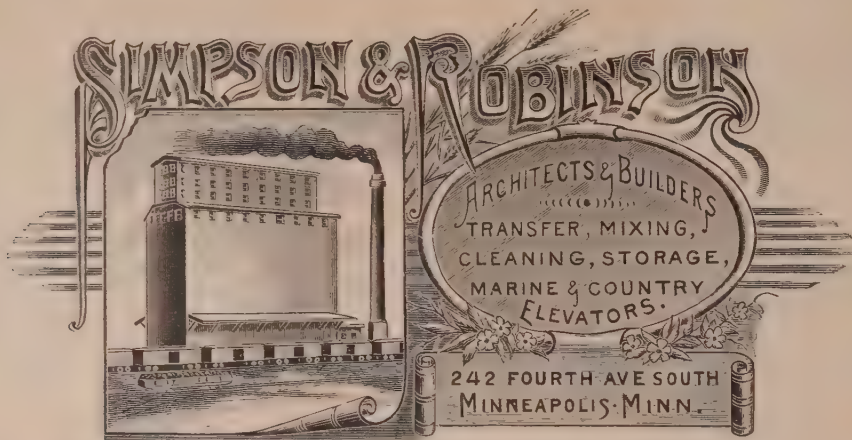
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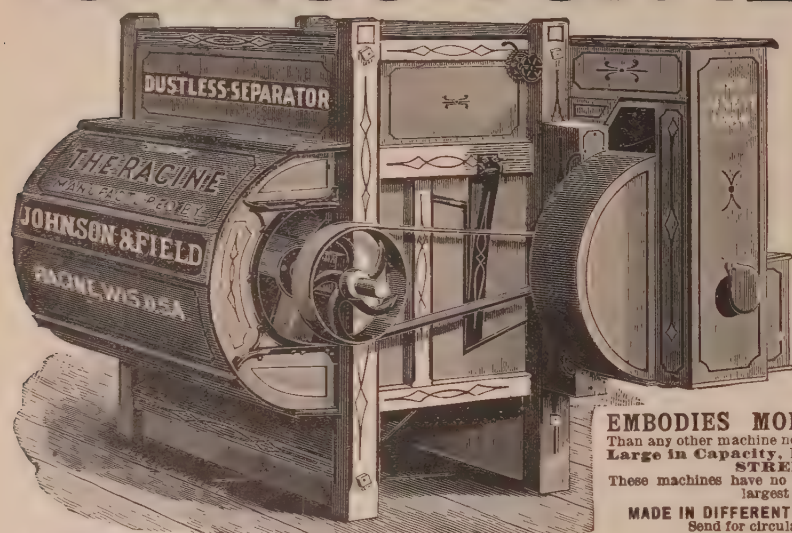
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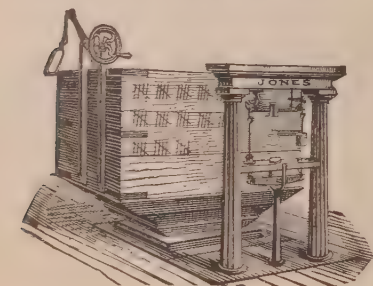


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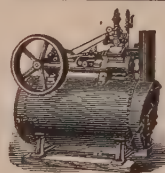
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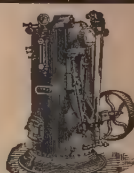
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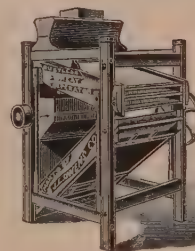
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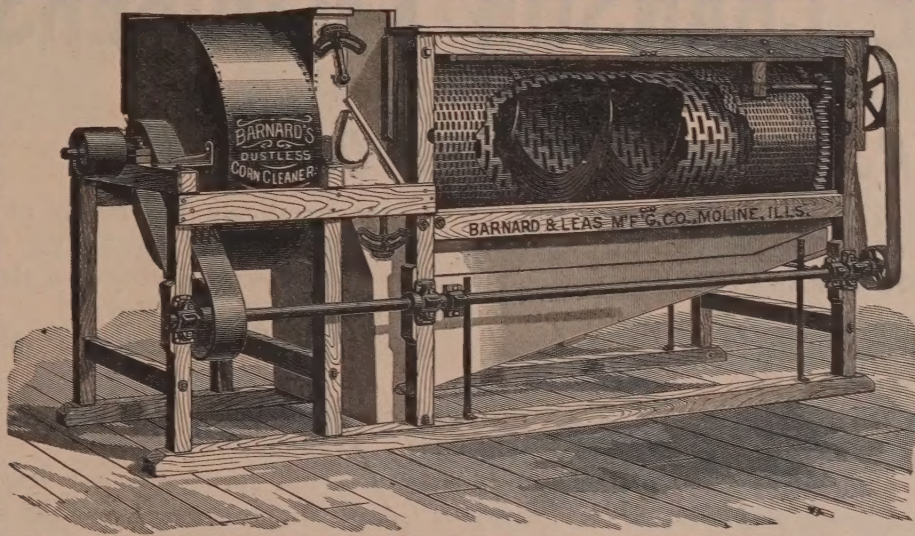
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They have been adopted by many of the leading elevators built during the last year, among which is the model 1,000,000-bushel house of Messrs. F. H. Peavey & Co., of Minneapolis, Minn., and the equally prominent house of the Santa Fe R. R. Co., both houses located near Kansas City, Mo.

OUR CRANSON SCOURERS, OF WHICH OVER 3,000 ARE IN USE,

Are built for all kinds of grain. They have been largely adopted, and users invariably find them to be money making machines.

It is conceded by all grain men who have carefully examined the working of the machine, that in it is embodied the true principles of a grain scourer.

The machine will scour very light or severe as may be required. The most tender grain can be cleaned, brightened or polished **without loss, without leakage, without damage.**

BARLEY. You will particularly find it to your advantage to investigate what we offer in the line of **BARLEY CLEANERS.**

We will be pleased to correspond with any and all who are interested, and to give such information as may be desired.

A complete line of our machines can be seen and full information obtained at our

Western Branch, 63-65 South Canal Street, Chicago, Ill.

Write for Circular, Prices, Etc.

HUNTLEY, CRANSON & HAMMOND,
SILVER CREEK, N. Y., U. S. A.

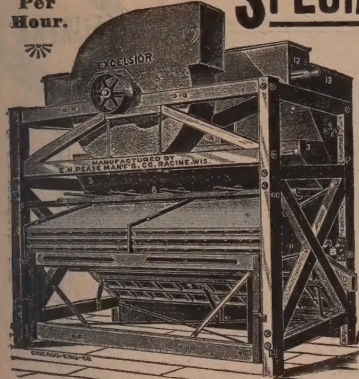
B. F. RYER, { 63-65 SOUTH CANAL ST., } Chicago, Ill. HENRY SIMON, { 20 Mount Street, MANCHESTER, ENG.,
Manager Western Branch. GENERAL AGENT FOR EUROPE.

Four Sizes from 300
to 2000 Bu. Capacity
Per
Hour.

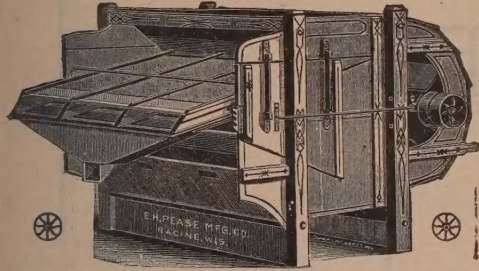
SPECIAL GRAIN HANDLING MACHINERY

—FOR—
GRAIN ELEVATORS
MILLS.
MALT HOUSES

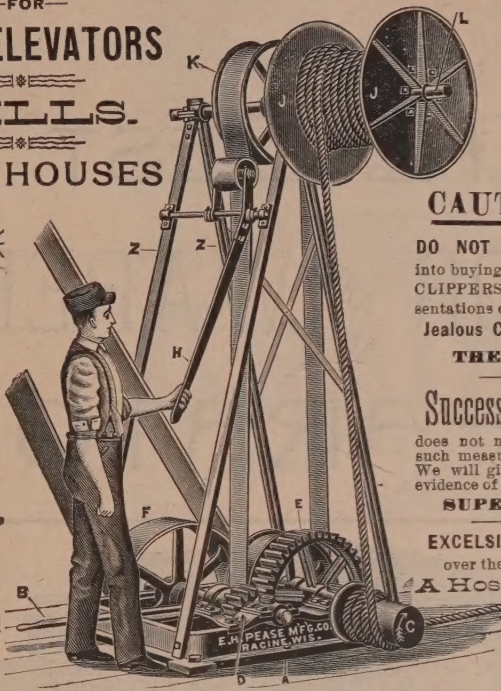
—AND—
BREWERS.



Excelsior Dustless Elevator Separator.



Several sizes, Styles and Capacities of End-Shake, and Side-Shake Warehouse Mills.



"HERCULES" POWER CAR PULLER.

CAUTION!

DO NOT BE DUPED
into buying INFERIOR
CLIPPERS by misrep-
resentations of our
Jealous Competitors.

THE MAKER

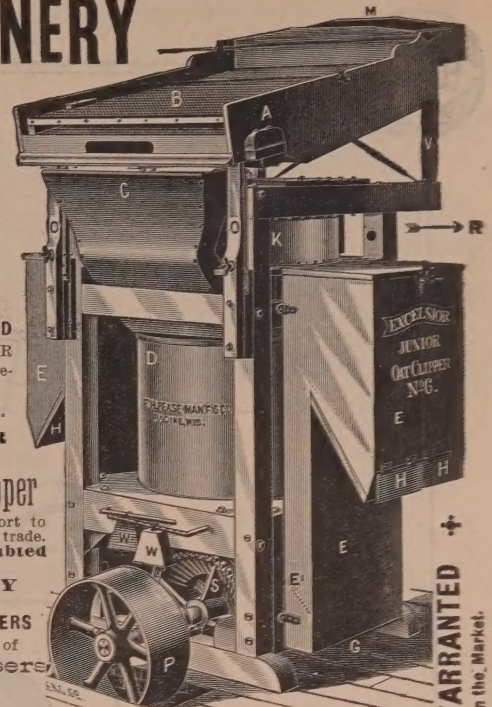
Successful Clipper

does not need to resort to
such measures to gain trade.
We will give **Undoubted**
evidence of the

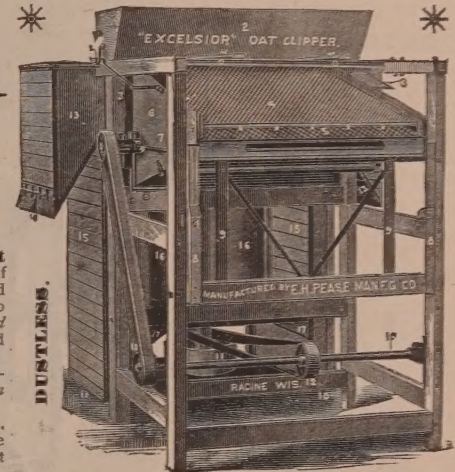
SUPERIORITY

—OF THE—
EXCELSIOR CLIPPERS

over the signatures of
A Host of Users.



"Excelsior Jr." Oat Clipper, Polisher and Separator.



"Excelsior" Oat Clipper and Separator.

PLENTY MORE TESTIMONIALS.

Letters similar to sample below, on hand for inspection of Buyers.

"Suppose you Write us for Particulars."

SENECA, ILL., May 8, 1890.

E. H. PEASE MFG. CO., Racine, Wis.

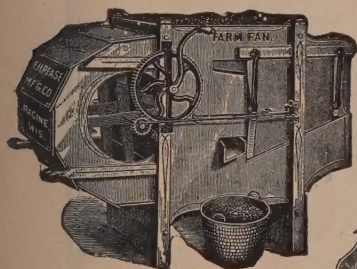
GENTLEMEN: In December, 1888, we bought one of your No. 8 "Excelsior" Combined Oat Clippers, Separators and Graders, and have clipped at least 250,000 bu. of oats with it without a cent of cost for repairs, and consider it one of the most valuable pieces of machinery in our elevator. Before buying, we examined other clippers in operation, but could find none we thought compared with the **Excelsior** in capacity or work. We have no trouble to raise the weight of oats anywhere from 3 to 10 lbs. per bu., and can change the grade while machine runs, at full speed by moving the governing weights upon the regulating levers. A few days ago we went to see a clipper work and judging from the work it was doing it is a total failure as an oat clipper.

We would not exchange our **Excelsior** Clipper for a 10-acre lot of clippers. We have yet to see a machine that will come up to your No. 8 **Excelsior** in quality or capacity. Our machine has done better than you claimed for it and paid for itself long ago.

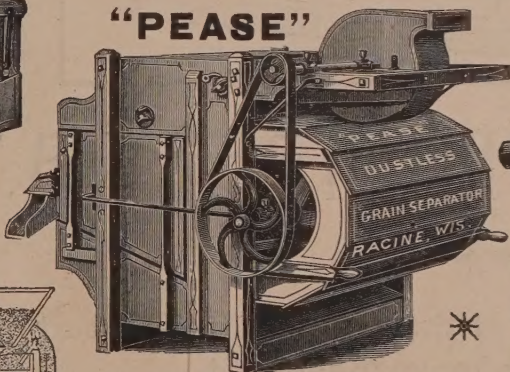
We tested our clipper a few days ago by clipping 3,500 bu. of oats by actual weight, with less than 1-2 lb. waste per bu. We also shipped two cars of oats from same bin to same commission merchant in Chicago, viz.: One car clipped and one car not clipped, we got 1-2 cents per bu. more for the clipped than the unclipped oats (1-2 cent per bu. covers cost of clipping and waste) ***** etc.

Yours truly,

HOGAN & NEILSON.



ALL SIZES AND STYLES OF
"Pease" Farm Fanning Mills.



DUSTLESS SEPARATORS.

OUR SPECIALTIES

—ARE—
Oat Clippers,
"Pease" Farm Fans,
"Pease" and "Wells"
Warehouse Fanning Mills,
"Pease" Dustless Separators,

EXCELSIOR

Receiving Separators,
Grain Graders, Cleaners
and Polishers, Car Pullers,
Bag Trucks, Warehouse Trucks,
ELEVATOR SUPPLIES,
Etc., Etc.

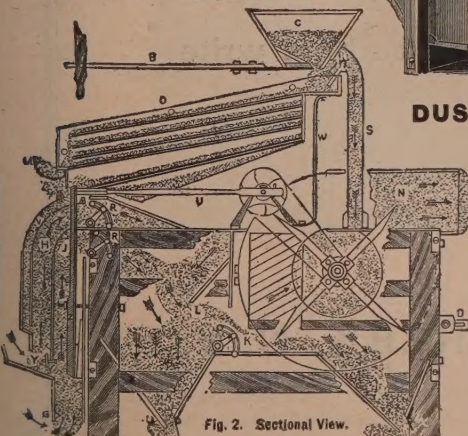
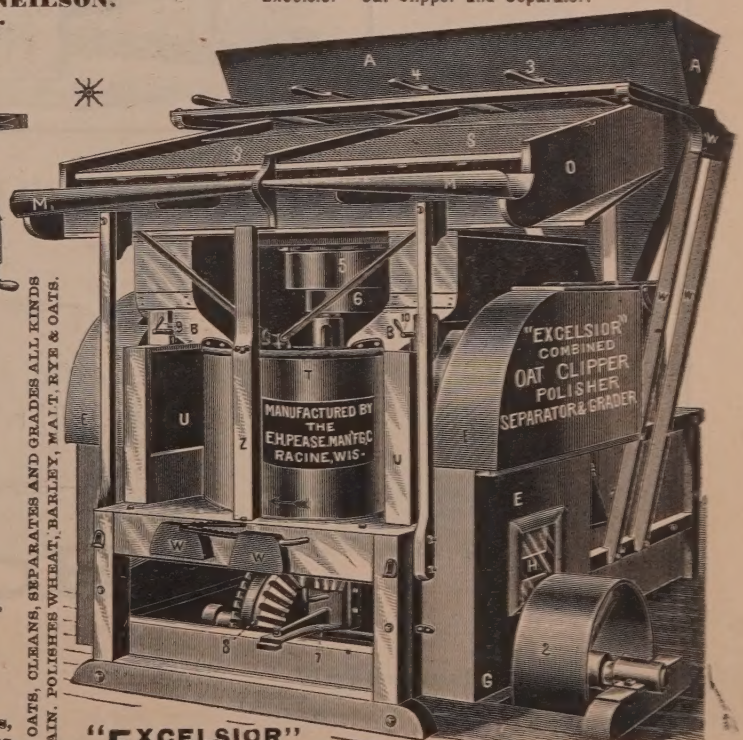


Fig. 2. Sectional View.
Excelsior Dustless Separator and Grader.



"EXCELSIOR"
COMBINED OAT CLIPPER AND
SEPARATOR, GRADER AND POLISHER.

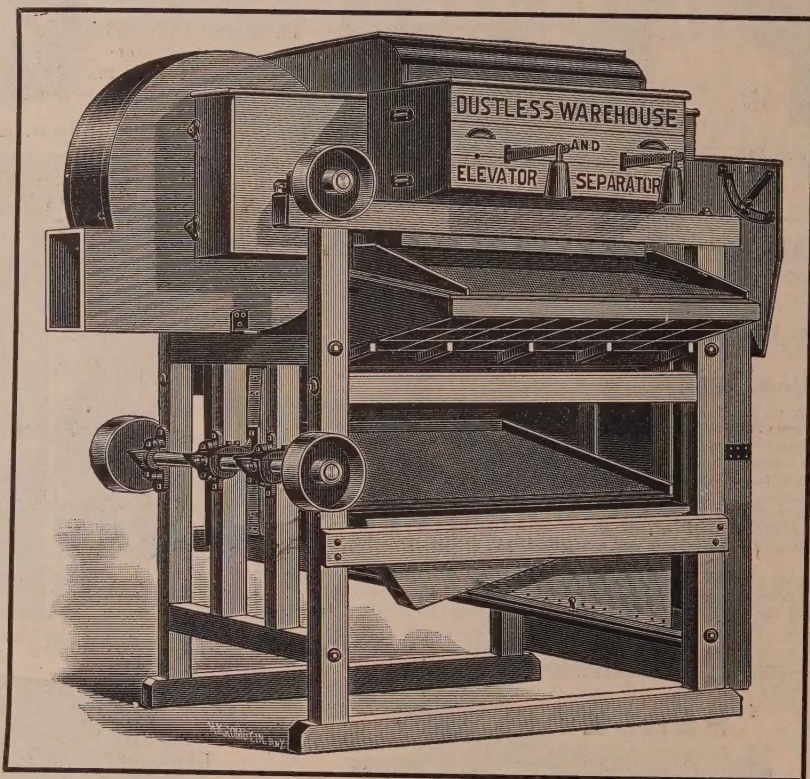
With same Power, Conditions of Grain,
and other like Circumstances.

THESE MACHINES ARE FULLY WARRANTED
To Excel any Other Similar Machines of like size in the Market.

E. H. PEASE MFG. CO., RACINE, WIS., U. S. A.



THE BEST ELEVATOR ^{AND} WAREHOUSE SEPARATOR



IS THE "EUREKA."

If you have the slightest doubt of the truth of this assertion, write
and we will remove that doubt.

S. HOWES,

Sole
Manufacturer.

SILVER CREEK, N. Y.

